CHRISTIAN ECONOMICS
VOLUME 4: SCHOLAR'S EDITION
VOLUME I

Books by the Author

An Economic Commentary on the Bible (31 volumes, 1982–2012)
Marx's Religion of Revolution (1968, 1989)
An Introduction to Christian Economics (1973)
Puritan Economic Experiments (1974, 1988)
Unconditional Surrender (1980, 2011)
Successful Investing in an Age of Envy (1981)
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Christian Economics: Activist's Edition (2017, 2020)

CHRISTIAN ECONOMICS
VOLUME 4: SCHOLAR'S EDITION
VOLUME I

Gary North

Point Five Press

Christian Economics, **Volume 4:** ***Scholar's Edition***

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This book is dedicated to

Richard C. Bernhard

In the spring of 1960, he gave me a D in economics.
I have devoted the last six decades to proving to
myself that he was incorrect in his assessment.

TABLE OF CONTENTS

Volume 1

Preface xi
Introduction 1

Part 1: Foundations

Introduction to Part 1 13
1. Presuppositions 22
2. The Covenant Model 34
3. Value-Laden Economic Theory 70
4. Epistemology 82
5. Temporal Limits to Growth 107
Conclusion to Part 1 119

Part 2: Categories

Introduction to Part 2 129
6. Purpose 140
7. Allocation 156
8. Boundaries 175
9. Imputation 189
10. Inheritance 210
Conclusion to Part 2 225

Part 3: Theory

Introduction to Part 3 231
11. Trinitarian Ownership 242
12. Initial Distribution 252
13. Redistribution 273
14. Scarcity and Costs 297
15. Diminishing Returns 313
16. Efficiency 322
17. Exchange 333

18. Economizing 346
19. Protectionism 362
20. Supply and Demand 378
21. Service and Cooperation 388
22. Competition 397
23. Plan Reconciliation 421
24. Money and Knowledge 432
25. Honest Money 450
26. State-Issued Money 465
27. Bank-Issued Money 483
28. Markets and Discovery 501
29. Predictability 512
30. Time and Interest 524

Volume 2

31. Land and Rent 539
32. Labor and Wages 548
33. Saving and Investment 560
34. Credit and Debt 572
35. Banking 589
36. Business Cycle 598
37. Economic Growth 612
38. Regulation 631
39. Patents, Copyrights, and Trademarks 653
40. Economic Laws 680
41. Economics Is Not Physics 705
42. Microeconomics and Macroeconomics 723
Conclusion to Part 3 735

Part 4: Kingdom

Introduction to Part 4 741
43. Kingdoms in Conflict 744
44. Lord's Day 757
45. Tithe 769

46. Charity 780
47. Contentment 797
48. The Calling 809
49. Bride Price 822
Conclusion to Part 4 840

Part 5: Misinterpretations
Introduction to Part 5 847
50. Prohibition of Interest 849
51. Jubilee Year 862
52. Slavery 874
Conclusion to Part 5 889

Part 6: State
Introduction to Part 6 895
53. Justice 903
54. National Defense 918
55. Bureaucracy and Taxation 929
56. Boundary Violations 948
57. Public Utilities 960
Conclusion to Part 6 972

Conclusion 976

Appendix A: From Reason to Intuition 984

Appendix B: The Heat Death of the Universe 1018

Bibliography 1047
Scripture Index 1051
Index 1058

PREFACE

I have counsel and sound wisdom; I have insight; I have strength. By me kings reign, and rulers decree what is just; by me princes rule, and nobles, all who govern justly. I love those who love me, and those who seek me diligently find me. Riches and honor are with me, enduring wealth and righteousness. My fruit is better than gold, even fine gold, and my yield than choice silver. I walk in the way of righteousness, in the paths of justice, granting an inheritance to those who love me, and filling their treasuries (Proverbs 8: 14–21).

A. Count the Cost

Proverbs 8 is the voice of wisdom. We read: "For whoever finds me, finds life, and he will find the favor of the Lord. But he who fails, harms his own life; all who hate me love death" (vv. 35–36). So, wisdom is worth pursuing. You must now begin to estimate this worth.

How committed are you to gaining biblical wisdom in economics? To answer this honestly, you must first answer these three questions. These are the three questions you should ask yourself before embarking on any major project.

What do I want to accomplish?

How soon do I want to accomplish it?

What am I willing to pay?

This is how Jesus put it. "For which of you, desiring to build a tower, does not first sit down and count the cost, whether he has enough to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it begin to mock him, saying, 'This man began to build and was not able to finish'" (Luke 14:28–30). In short, *count the cost*. But also count the potential benefits.

One of the fundamental principles of all systems of economic theory is this: "You can't get something for nothing." Christianity teaches that God offers saving grace to some people without cost to them. But this grace is based on the high price that Jesus Christ paid at Calvary. Furthermore, God's grace has purposes: "For by grace you have been saved through faith. And this is not your own doing; it is the gift of God, not a result of works, so that no one may boast. For we are his workmanship, created in Christ Jesus for good works, which God prepared beforehand, that we should walk in them" (Ephesians 2:8–10).

Christian economics does not teach the labor theory of value. Economic value does not come from work. It comes from the imputation of God and then (maybe) consumers. Absorbing information is insufficient to please God. *You must convert this information into useful service.* This process of service should already have begun in your life. James wrote: "But be doers of the word, and not hearers only, deceiving yourselves. For if anyone is a hearer of the word and not a doer, he is like a man who looks intently at his natural face in a mirror. For he looks at himself and goes away and at once forgets what he was like. But the one who looks into the perfect law, the law of liberty, and perseveres, being no hearer who forgets but a doer who acts, he will be blessed in his doing" (James 1:22–25).

You may think that God has called you to be a scholar. He has called very few people to this form of service through the ages. There are salaried scholars in colleges and universities today, but this was not a widespread phenomenon until after World War II. If you decide to be a Christian scholar who goes to the Bible in search of first principles and also specific applications, you will find it difficult to be employed as a professor. Your presence on the faculty will embarrass the other faculty members. Also, you will be requited by the department to assign textbooks and monographs that are structured in terms of humanism's principles of interpretation. So, your scholarship will have to be mostly outside the classroom unless you are granted a degree of independence that is rare. Do not count on such independence. Scholarship will have to become your calling, which I define as follows: "The most important thing you can do with your life in which you would be most difficult to replace."

There is no career advantage, academic or otherwise, associated with affirming Christian economics as a separate discipline. There are many career disadvantages. Why should this be the case? Because Ph.D.-holding

economists have been screened by their formal academic training and then by subsequent peer-reviewed work. *This system of screening is methodologically atheistic.* The entire modern university curriculum is structured in terms of this presupposition: "The God of the Bible and His revelation in the Bible are irrelevant to academic discourse or public debate." By promoting Christian economics, you will be saying implicitly that your peers have been unfaithful to God to the extent that they have been faithful to the operating presuppositions of academic economic theory and academia in general. They will understand this. They will resent the implication. They will not applaud your efforts. They will ignore your efforts if they can. If they cannot safely ignore your work, because you become prominent, they will criticize it. Do not expect them to read what you have written. Do not expect them to be honest in analyzing your work even if they have read smatterings of it.

Do not let this bother you. Keep working. Keep publishing. The best defense is a good offense. Stick to your knitting.

B. What I Learned as a Copywriter

Beginning in 1974, I began to learn the skills of direct-response copywriting in order to promote my newly launched newsletter, *Remnant Review*. This self-education program was basic to the success of my growing publishing business. I soon learned that it was also basic to my calling as a scholar. Let me explain.

1. The Two Questions

A copywriter soon learns that readers are initially skeptical about his claims. They ask themselves two crucial questions. The first is "So what?" The second is "Who says?" Over the years, I have learned that this mental response to advertising is not limited to advertising. Scholars ask the same two questions when they read academic materials. This is why there are footnotes. Footnotes help the author to answer the second question: "Who says?" But the first one—"So what?"—is by far the most difficult question to answer. Readers of materials promoting a new interpretation of familiar material in their field are prone to respond negatively based on this widespread criticism: "Not developed here." If you are writing from outside an academic guild, expect organized resistance if you begin to gain followers inside the target market of the guild. The classic book on this resistance by academic

guilds is Thomas Kuhn's monograph, *The Structure of Scientific Revolutions* (1962). You would be wise to read it early in your academic career.

2. Your Audience

A copywriter learns early in his career to ask this question: "Who is my audience?" Then he asks this: "How can I get my message to members of this audience?" Very few scholars ask these two questions. They do not see themselves as salesmen. But they are salesmen. *Whoever is in any way involved in the task of persuasion is a salesman.* Such a person is trying to change people's minds and then change their behavior. People resist both. It is usually costly to change. There is a rule: "You can't change just one thing." When you seek to persuade someone of a new idea, you are asking that person to change far more than just one idea in his life. He cannot foresee the consequences of such a change. He may be aware of the famous "law of unintended consequences." *Life is mostly a series of unintended consequences.*

Here is a huge problem that I have with this four-volume book: targeting my audience. I knew I would have this problem in 1973. First, pastors are not interested in economic theory. Second, economists are not interested in Christian theology. I decided to target intelligent laymen. This strategy has worked. But there is an inherent problem with materials published on the Web. First, I do not know who you are. Second, I do not know where you are. Third, and most important, I do not know *when* you are. Yet I tried to write this volume in such a way that it might retain your interest sufficiently so that you will finish reading it. It will take you many hours to do this.

Because of the World Wide Web, I have no control over who will come across this book. Because of the smartphone, introduced by Apple in 2007, digital books can be read easily without a large desktop computer. The number of people who can access a book in remote villages is increasing. Free translation software will make this book available to people who cannot speak English. This software has already begun to overcome the cultural barrier created by God's curse at the tower of Babel (Genesis 11).

There is another aspect of writing that the Web has made possible. Books do not go out of print. They stay online in digital form. It is almost cost-free to store digital books online. Readers can access them at any time from any place that has an Internet connection. Always before, books disappeared after publishers ceased making money from sales. This is why so few

books survived. This is no longer a problem. This means that a book can be read a century or more after its publication.

3. Timely vs. Timeless

A book must be of interest to someone. The author understands his era, his geography, and his audience because he is a contemporary. But if he wants his book to retain influence long term, he must write for an audience that he does not understand well. To gain a large audience, a book must deal with contemporary issues. But the more contemporary it is, the sooner it ceases to be relevant. Conversely, the more timeless a book is, the less likely that it will appeal to a contemporary audience. This is the perpetual marketing problem of timeliness vs. timelessness.

The Bible and the Koran are permanent best-sellers. They are timeless. Generation after generation, readers find ways of applying these books' message to current conditions all over the world. Books that openly apply permanent principles to contemporary issues have a far better likelihood of retaining influence if the issues they deal with are also permanent. Such issues as marriage, disciplining children, getting a good job, making money, solving personal problems, and getting a better education inexpensively continue to sell.

In this book, I tie the text to Bible passages. I do my best to use examples from the Bible rather than recent events. While Wikipedia will keep information on events available permanently, which is itself a revolution in education, I prefer to help people learn by biblical examples. These examples have greater persuasive power. This is another reason why I wrote 31 volumes of economic commentaries on the Bible, 1973–2012.

4. Attracting Your Audience

If you are persuaded by what I have written, you now have a large task. First, you must master my basic concepts and arguments. They must come to mind almost effortlessly to you. Second, you must learn how to teach this material to those teachers or would-be teachers who come under your influence. Third, you must find ways of extending my analysis to popular topics of your time and place. Fourth, you must extend my analysis theoretically. You must find new ways of thinking about the principles I present here, yet without violating biblical principles. Fifth, you must find new ways of getting out the message. You must target an audience. Then you must reach

members of that audience. You must become familiar with the appropriate marketing technologies.

Do not seek to persuade the masses. That is a futile task for a scholar. Instead, seek to make available materials that will help dedicated people to achieve their goals. A classic essay on this strategy was written by Albert J. Nock in 1937: "Isaiah's Job." There are reprints of it on the Web. I recommend that you read it more than once. I hope it will immunize you against the dream of persuading the masses. Persuade those few who are willing to consider what you have to say. Speak to the remnant, not the masses. Use what you learn here to extend this message to the remnant.

Conclusion

Not everyone who begins reading this book will finish it. Of those who finish, a few will read it again in order to gain mastery. Of those few who attain mastery, a few will become teachers of teachers. Of those who do become teachers of teachers, a few will become proficient. Of those few who become proficient, a few will become virtuosos. Maybe you will be among this small group in 20 or 30 years.

Mastery of this book must be a calling. It was a calling for me to write it. Do not pursue this self-improvement program for the sake of fame. There are very few people who ever attain fame. Be content with attaining mastery. Then wait for God's call to you to demonstrate your virtuosity. Never forget: *virtuosity begins with virtue*. It requires long, hard work, usually performed free of charge. This is self-sacrificing service.

INTRODUCTION

> *Serve with all your heart, as though you were serving the Lord and not people, because we know that for whatever good deed each person does, he will receive a reward from the Lord, whether he is slave or free (Ephesians 6:7–8).*

Your serious work now begins. Mine is nearing completion. Probably.

A. Textbooks and Treatises

The *Scholar's Edition* is a treatise. It is not a textbook. There is a big difference between a treatise and a textbook. A full-time teacher writes a textbook in order to make lots of money from book royalties. His targeted audience is huge: ideally, hundreds of thousands of high school students or university students in a particular academic field. He has received a contract from a textbook publishing company. Textbooks are expensive to produce. They sell for very high prices. The most famous college textbook in economics was written by Paul Samuelson in 1948. The nineteenth edition sells for $220. That was the price of a sixth of an ounce of gold in 2019. A textbook author hopes that a committee of experts in his field will recommend his manuscript for publication. Members of this initial screening committee know that the book will also have to be approved by textbook-review committees in schools. A textbook may be vetoed by a majority faction in a majority of schools on this basis: it deviates too far from the dominant outlook in the field.

The textbook must be up to date. This means that it must be written to become out of date within a few years, so that the publisher can sell a new edition. This is vital for the publisher's income. The publisher knows that used copies of the textbook will drive down the price of the latest edition. The larger the number of used copies of the latest edition, the less the demand for new copies. All publishers, no matter how anti-free market they are, understand and acknowledge the reality of the law of supply and demand. So, there must be a new edition every three years. Ideally, there must

be many new editions for decades.

No one re-reads his college textbooks. He may keep them on a bookshelf as visible proof that he attended college, but he does not re-read them. Why not? There are at least two reasons. *First*, textbooks are written to get past two committees. A skilled author learns a basic rule at some point in his career, preferably early: *never write for a committee*. Instead, he must write to persuade his mental image of a future reader. This imaginary reader represents the group that is the author's targeted audience. I learned this technique by writing direct-response advertisements. *Second*, an old textbook is out of date. This is the inescapable nature of all textbooks. They are written to be timely. But any book that is written to be timely loses its connections with readers within a few years. It becomes old fashioned, meaning out of fashion. It becomes, if not obsolete, than at least "old hat." This is why you cannot find textbooks on the shelves of research university libraries. Librarians know they will be filler within a few years: never checked out.

A treatise is different. It is written "for the ages." It is supposed to be timeless. Of course, nothing is timeless except God and the Bible. But the more timeless a book is, the more likely that it will have long-term influence. The author of a treatise wants long-term influence for his book. Also, the author's steadfast hope in his book's long-term influence softens the multiple blows of today's lack of sales, readers, and footnotes to his book by other scholars. English-speaking people have a familiar saying for this: "Hope springs eternal."

The author of a treatise believes that he understands the broad truths of his academic field. He also believes that he understands unchangeable and nearly unbreakable laws of causation. These fixed laws can be understood only because the laws of thought are also fixed. He believes that there is a correlation approaching 100% between the fixed laws of his academic field and the laws of thought. He thinks he understands both. He thinks that book explains this correlation between the external realm and universal reason. He may be willing to write a new edition of his book if some influential book reviewer challenges a section of his first edition. He wants to answer it in the second edition. Or he may seek to clarify some minor issue. But he does not expect to make major changes in either his book or his thinking. Such changes would imply that his book is incomplete. Why? Because it is subject to change, and therefore it is not a book for all time and across all borders. This thought is unacceptable to the author of a treatise.

He thinks his book is universal. He expects readers down through the ages and across the oceans to re-read his book in order to renew their commitment to the timeless truths that his book presents in a compelling way.

That is surely true in my case. I do not intend to revise this volume. For one thing, I hate to index my books. If I had to change anything significant in this volume, it would probably change the book's pagination. I would then have to re-index it. That thought is horrifying. Second, I think it is sufficiently accurate in theoretical content as to be close to timeless in scope, although not in all of its details. If it is not, then I have wasted almost six decades of research and over five decades of published writing. That thought is also horrifying—even worse than re-indexing. Third, I am 78 years old. Fourth, I was diagnosed with stage III prostate cancer in mid-2017, when I was halfway through writing Volume 1. Despite radiation therapy, I do not expect to be around long enough to revise my book. I have other projects to complete.

In this volume, I initially set forth the theoretical foundations of a reconstruction in economic theory along explicitly biblical lines. This has not been attempted before. But this book is more than a treatise on economic theory. I am attempting to set forth general principles of interpretation that will lead to *a reconstruction of every field of thought, academic and non-academic*. I am using economics as a model for the other fields. Nothing like this has been attempted before.

Treatises are rare. Academia avoids them. They are even less popular than books on epistemology: "What can men know, and how can they know it?" There are few if any courses on epistemology in academic departments other than philosophy and (maybe) religion. Even in philosophy, the teacher does not set forth a view of epistemology that he says should bind others in his field. That might get him fired. It would surely get him attacked by his peers. So, it is a course on various competing approaches to epistemology.

In the field of economics, the first all-encompassing treatise on economics was Ludwig von Mises' *Human Action*, published by Yale University Press in 1949. It had this subtitle: *A Treatise on Economics*. There are two other books like it, both written by Mises' disciples. One is Murray Rothbard's *Man, Economy, and State: A Treatise on Economic Principles*, published by Van Nostrand in 1962. The book was financed by the libertarian Volker Fund. The other is George Reisman's *Capitalism: A Treatise on Economics*, published by the tiny Jameson Books in 1996. It is a huge book: over

1,000 pages of two-column, small-print text. It is rarely cited in footnotes. Members of other schools of economic opinion avoid writing treatises. So do university professors in other academic disciplines.

If you consider all four volumes of this book, you will see that they go beyond all previous treatises. Volume 1 targets beginners. Volume 2 helps transform beginners into teachers. Volume 3 calls all readers to specific action steps. Volume 4 lays the presuppositional foundations of a reconstruction of economic theory. This multi-volume book, in the vernacular, is a package deal. It is not an armchair book. *It is a work of applied theology.* If people do not begin to change their lives after they have read it, then writing it and the 45 volumes that laid the groundwork for it was exercise in failed entrepreneurship. I am well aware that most projects fail, and almost all grandiose projects fail. This has been a grandiose project.

What is unique about this four-volume book is this. It does not merely lay the foundations of the discipline of economics. It goes beyond this. It discusses the way the world works as a cosmos. It does not limit its discussion to economic causality and man's understanding of this causality. This is what Mises did in the first four chapters of *Human Action*. In contrast, I discuss economics as a subset of cosmology. Academia denies the legitimacy of such an attempt. Yet every academic discipline imports issues of cosmology and general human understanding into the discipline, usually by the back door. This is surely the case in the social sciences. The back door in economic theory is economic practice: the importation of non-scientific, non-neutral ethical principles into economics by way of policy-making. *The economist as policy advisor is the economist as prophet: speaking on behalf of an implicit but unstated religious worldview.* But he cheats. He refuses to admit that he has moved from his respected position as a guild-certified scientist to a politician.

B. The Starting Points

A treatise must have a starting point. Here is mine: "In the beginning God created the heaven and the earth" (Genesis 1:1). To be faithful to the Bible, a Christian economist must begin with this verse. So must a Christian political theorist, a Christian psychologist, a Christian sociologist, and a Christian anything else. *The doctrine of God's creation out of nothing is supposed to be the starting point of all human thought.* This is why the Bible begins with God's week of creation. It does not begin with the Big Bang.

Second, Christianity identifies God as a Trinity: Father, Son, and Holy Ghost. This is where Christian economics must begin. So must Christian political theory, Christian psychology, Christian sociology, and Christian everything else. Third, God had a purpose before the creation: the redemption of the lost.

Any form of Christian thought that does not forthrightly begin with these three presuppositions is not systematically Christian. Any form of human thought that denies the truth of this three-part affirmation regarding God and His creation of the universe out of nothing, as well as the epistemological necessity of beginning with it, is a denial of the legitimacy of Christian thought. It necessarily denies the relevance of Paul's affirmation to covenant-keepers: "'For who has understood the mind of the Lord so as to instruct him?' But we have the mind of Christ" (I Corinthians 2:16). Paul warned Christians not to be deceived in this regard. "Therefore, as you received Christ Jesus the Lord, so walk in him, rooted and built up in him and established in the faith, just as you were taught, abounding in thanksgiving. See to it that no one takes you captive by philosophy and empty deceit, according to human tradition, according to the elemental spirits of the world, and not according to Christ. For in him the whole fullness of deity dwells bodily, and you have been filled in him, who is the head of all rule and authority" (Colossians 2:6–10).

I remember going on a speaking tour in Northern California sponsored by Chalcedon, R. J. Rushdoony's educational foundation. He, Greg Bahnsen, and I presented a series of three-hour evening seminars. This was probably sometime between mid-1973 and late 1974. Bahnsen and I were both on Chalcedon's payroll at that time. I recall vividly that Bahnsen used this passage as his starting point in his presentation on the necessity of consistent Christian philosophy.

All three of us were disciples of Cornelius Van Til. This had been Van Til's message throughout his career: *resisting the lure of non-Christian philosophies.* Van Til argued that without biblical revelation, all of mankind's speculation is fallacious. Covenant-breaking people can speak the truth, he argued, but they do so only by means of premises that implicitly rest on God's creation of the cosmos out of nothing and His revelation to men in the Bible. The covenant-breaker uses stolen intellectual goods. In Rushdoony's first book, *By What Standard?* (1959), a book on Van Til's philosophy, he wrote this prescient passage.

> Autonomous man is thus like some Western families, whose sole means of subsistence is in swinging a wide rope. Such men emphatically deny that they rustle cattle, although they have no other visible means of support, while at the same time living entirely on the ranchers' stock. Thus natural man does have knowledge, but it is borrowed knowledge, stolen from the Christian-theistic pasture or range, yet natural man has no knowledge, because in terms of his principle[,] the ultimacy of his thinking, he can have none, and the knowledge he possesses is not truly his own. If the rustler were faithful to his profession of honesty, he would either starve to death from lack of food or be compelled to honesty. If the natural man were faithful to his own presuppositions, he would either admit that he has no knowledge whatsoever and can know nothing, or he would turn to the ontological trinity as the sole source of knowledge and the only true principle of interpretation. The natural man has valid knowledge only as a thief possesses goods (p. 24).

All human thought is circular, Van Til argued. It necessarily begins with a set of premises. He called these presuppositions. If a system of thought is logically consistent, it must end where it began: affirming both the validity and efficacy of these presuppositions. He argued that the circularity of Christian thought is not a liability. *All human thought is circular.* Christian circular reasoning should be self-conscious. He spent his long classroom teaching and writing career seeking to make Christians self-conscious regarding the biblical foundations of this circular reasoning process. He argued that the starting point of all human thought is supposed to be the biblical account of the creation. Christians should begin here. Second, the God of the Bible is a Trinity. Third, the final court of appeal is God's definitive declaration on the day of judgment (Matthew 25:31–46).

In between the creation and the final judgment is history. In history, there is no final court of appeal, but there are multiple courts that possess legitimate authority. They offer preliminary assessments of truth and falsehood. The covenantal courts are these: individual, family, church, and state. In the realm of intellectual matters, there are multiple courts: academia, publishing markets, social media, YouTube, and many others. None issues a final judgment outside of its jurisdiction. Any declaration of truth or false-

hood in any of these realms is tentative. Opinion-setters come and go. Successors change their minds. Also, a defeat in one area of influence is not always a defeat in others.

This brings me to the science of economics.

C. The Atheism of Academic Economic Science

Economics was the first social science to be developed in terms of the assumption that neither theology nor ethics has any role to play in economic theory. This is the argument in William Letwin's 1963 book, *The Origins of Scientific Economics*. In a detailed study of late seventeenth-century mercantilist publicists, who were the first scientific economists, he concluded that their negative reaction to the devastation of the English Civil War (1642–1649), which was a war between Protestant factions, King vs. Parliament, led to a conclusion: *theology cannot bring men to peaceful conclusions*. Therefore, they concluded, economic policy must be grounded in science, especially science based on numerical calculation, which is neutral. They believed that such a science could produce agreement regarding economic policy. This assumption has been dominant in the economics profession ever since. It is believed as deeply today as it was then.

A century later, Adam Smith challenged the mercantilists' arguments favoring state intervention into the economy in the name of making a nation wealthier. He wrote *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) as a refutation of such interventionism. The market, not the planning state, is what increases individuals' wealth and therefore also the wealth of the nation. Smith did not adopt mathematics to make his case, but he adopted the mercantilists' outlook on the need to avoid appeals to theology and ethics. He did not mention, let alone invoke, his ethical and theological arguments in his other book, *The Theory of Moral Sentiments* (1759). The two books shared only this: the phrase "Invisible Hand," a metaphor for the order which results from the dual sanctions of the free market: profit and loss.

This was self-deception on a massive scale. There can be no policy recommendations apart from ethics. This was not clear to economists from the 1650s until 1938. In 1938, there was a debate in the pages of the British academic journal, *The Economic Journal*, between a follower of Mises, Lionel Robbins, and a follower of John Maynard Keynes, Roy Harrod. Robbins had argued in his book, *An Essay on the Nature and Significance of Economic*

Science (1932), that it is impossible to make scientific comparisons of people's subjective values. He was logically correct. It is not scientifically possible, given the premises of modern economic science, which are implicitly atheistic. But then Harrod challenged him in print. If Robbins' argument is true, he said, then it is illegitimate for an economist, in the name of science, to make policy prescriptions. Every policy guarantees that there will be winners and losers. Harrod asked if Robbins was denying the scientific validity of all policy recommendations. Robbins backed down. In doing so, he abandoned any legitimate appeal to scientific neutrality. This fact should have been widely perceived within the economics profession after 1938: all economists who make policy recommendations in the name of economic science do so only on this basis: their recommendations are not ethically neutral. *There can be no ethical neutrality in policy-making.*

That 1938 debate is long forgotten. In fact, it was widely ignored at the time. But its implications are inescapable for all policy-making economists. What Robbins conceded means that the mercantilists' original quest for neutrality in the name of a hypothetically value-free, common-ground methodology was hopeless then, and it remains hopeless today. I have been making this argument in print ever since my 1982 economic commentary on Genesis. I shall continue to make it in this book.

D. A Christian Alternative

I present my case for Christian economics is terms of this conclusion: there can never be value-free economic theory. *Theological neutrality and ethical neutrality are myths.* Neutrality has been the reigning myth in economic science ever since late-seventeenth-century mercantilism. This myth is rarely challenged in books written by economists. It is never challenged in academic economics journals. It is simply assumed. This assumption has not been proven. The Bible teaches that it cannot be proven. Jesus said: "The one who is not with me is against me, and the one who does not gather with me scatters" (Matthew 12:30). *There can be no neutrality.* This is why I decided to write this book and the volumes that preceded it.

I take up this question in Chapter 4 on epistemology. Epistemology is not a popular topic outside of advanced university classes in philosophy. In every academic discipline, most scholars and practitioners simply assume that what they are doing is value-free. The main exceptions have been Marxists. Marx taught that philosophy and ethics are merely defenses of the rul-

ing class. They are aspects of the mode of production, which he called the substructure of all society. He called philosophy the superstructure. It is ephemeral. When the prevailing mode of production is replaced by a new mode, the class philosophy of the superseded era fades away. But there have been few self-conscious Marxists in the West, and even fewer academic Marxist economists. Today, Marxist philosophy, unlike the capitalist mode of production, has been replaced. This happened almost overnight in the aftermath of Gorbachev's public dissolution of the Soviet Union on December 25, 1991. When the Soviet flag was lowered, so was Marxist philosophy, sociology, and economics. (http://bit.ly/FlagLowered)

Conclusion

It is time to raise the flag of Christian social theory generally, and specifically the flag of Christian economics. I invite you to participate metaphorically in this ceremony in your circle of influence. But I warn you: not many Christian academics will salute it. Before you decide to commit to this lifetime calling, count the cost (Luke 14:28–30). Second, finish what you start. "Jesus said to him, 'No one who puts his hand to the plow and looks back is fit for the kingdom of God'" (Luke 9:62). Take these warnings seriously.

Part 1
FOUNDATIONS

INTRODUCTION TO PART 1

So the king sent to Dothan horses, chariots, and a large army. They came by night and surrounded the city. When the servant of the man of God had risen early and gone outside, behold, a large army with horses and chariots surrounded the city. His servant said to him, "Oh, my master! What will we do?" Elisha answered, "Do not fear, for those who are with us are more than those who are with them." Elisha prayed and said, "Lord, I beg that you will open his eyes that he may see." Then the Lord opened the servant's eyes, and he saw. Behold, the mountain was full of horses and chariots of fire around Elisha" (II Kings 6:14–17).

I trust that you have read the first three volumes of this book. I especially hope that you have read Volume 2, *Teacher's Edition*. If you have decided to read Volume 4, you are persuaded that there may be something to my approach to economics.

Still, you may have doubts about the wisdom of becoming an economic scholar. I do not blame you. The army that is arrayed against you is immense: 20,000 Ph.D.-holding economists, armies of policy-making government bureaucrats in 200 nations, hundreds of academic economics journals, thousands of economics books, and an international system of universities. They are all committed to secular humanism. They are all convinced that the God of the Bible does not exist, that the Bible is not the supreme authority in history, that God's law is not binding, that God does not bring sanctions in history, and that the idea of a worldwide Christian civilization is preposterous, not to mention morally appalling.

Elisha's assistant had similar doubts. He saw the invading army. He did not see the host of heaven above his head. Elisha did. Elisha prayed to God, asking Him to open his servant's eyes. God graciously did as He was asked. The servant saw chariots of fire.

I have prayed a similar prayer on your behalf. I pray that God will open

your eyes. Do not expect to see chariots of fire. Chariots are obsolete these days. Here is what I pray that God will reveal to you: the army that confronts us is the equivalent of the army confronting Elisha. It is a horse-based army in the age of high technology. It is like the cavalry in World War I, which did not survive machine guns and tanks. But the generals did not see this coming in the fall of 1914.

Part 1 contains five chapters. My goal for these chapters is simple to describe. I want you to get a preliminary sense that the world of academic humanism is intellectually bankrupt. This bankruptcy is especially evident in the area of economics, both in theory and practice. After you read Part 1, you will better understand that the world of humanism in general and economics in particular is like a card shark playing poker with marked cards. He seems to be on a winning streak. What I want you to understand is this: humanism's winning streak will not be sustained. What appears to be its amazing good luck will not prevail when the Christian world finally stops playing in humanism's casino at humanism's table with humanism's marked deck.

Humanists heap ridicule on Christians for trusting the Bible rather than trusting humanism's latest fad. Humanists in academia come in the name of reason, scientific evidence, and open debate. They insist that their way of getting the truth, of "getting to the bottom of things," is superior to Christianity's way, since the Bible cannot be trusted as a reliable guide. I invite you in Part 1 to examine the intellectual foundations of humanism's faith in a worldview based on the following ideas: a chance-based, purposeless universe that is dying (entropy), the benefits of value-free science, and perpetual economic growth.

I am going to show you how to spot humanism's marked cards.

A. Cornelius Van Til's Challenge to Humanism

Where will you put your trust? In the Bible or in the mind of fallen man? I suggest that you trust the Bible. He wrote this.

> According to Scripture, God has created the "universe." God has created time and space. God has created all the facts of science. God has created the human mind. In this human mind God has laid the laws of thought according to which it is to operate. In the facts of science God has laid the laws of being according to which

> they function. In other words, the impress of God's plan is upon his whole creation.
>
> We may characterize this whole situation by saying that the creation of God is a revelation of God. God revealed himself in nature and God also revealed himself in the mind of man. Thus it is impossible for the mind of man to function except in an atmosphere of revelation. And every thought of man when it functioned normally in this atmosphere of revelation would express the truth as laid in the creation by God. We therefore may call a Christian epistemology a revelational epistemology.

These are the first two paragraphs in Chapter 1 of Van Til's book, published in 1969, *A Survey of Christian Epistemology*. This book was originally published in 1932 under this title: *The Metaphysics of Apologetics*. As Van Til admitted in his 1969 Preface: "How ancient and out of date such a title seems to be now."

In Chapter 1 and Chapter 4 of this volume, I survey some of the issues that are involved in understanding epistemology. Epistemology is an academic term used by philosophers to deal with this two-part question: "What can man know, and how can he know it?" This raises a secondary question: "What is man? Are we talking about an individual, or are we talking about mankind as a whole?" This is another major question of epistemology.

In the table of contents of *A Survey of Christian Epistemology*, Van Til took a unique approach. He summarized the key idea in each of the chapters. I have never seen any other author use this technique. He did not do this in any of his other books. Here is his summary of Chapter II. "The question we must ask constantly is how anyone has conceived of the relation of the human mind to the divine mind. It is on this point that the greatest difference obtains between the theistic and the non-theistic position. The former cannot think of the human mind as functioning at all except when it is in contact with God; the latter presupposes it to be possible that the human mind function normally whether or not God exists." This is the issue that I raise in Chapter 1 and Chapter 4 of this book. My answer corresponds to what Van Til called the theistic position, by which he meant the Christian position. It has undergirded my work in Christian economics from 1962 until today. This is why I have written the four volumes of this

book and the 45 support volumes that preceded it.

I am now going to offer an extended quotation from his book. I suggest that you read it carefully. It will help you understand Chapter 1 and Chapter 4. It will also help you understand my life's calling. If you remember, I define the calling as follows: the most important thing you can do with your life in which you would be most difficult to replace. Van Til wrote about the starting point of consistent covenant-keeping thought.

> It is taken for granted that everybody begins the same way with an examination of the facts, and that the differences between systems come only as a result of such investigations. Yet this is not actually the case. It could not actually be the case. In the first place, this could not be the case with a Christian. His fundamental in determining fact is the fact of God's existence. That is his final conclusion. But that must also be his starting point. If the Christian is right in his final conclusion about God, then he would not even get in touch with any fact unless it was through the medium of God. And since man has, through the fall and Adam, become a sinner, man cannot know and therefore love God except through Christ the Mediator. And it is in Scripture alone that he learns about this Mediator. Scripture is the word of Christ, the Son of God and the Son of Man. No sinner knows anything truly except he knows Christ, and no one knows Christ truly unless the Holy Ghost, the Spirit sent by the Father and the Son, regenerates him (p. 5).

This is supposed to be the starting point of all covenant-keeping thought. It is supposed to be the starting point of all thought, but covenant-breakers deny it. This is why, as Van Til argued throughout his career, there is no common epistemological ground or ethical ground between the covenant-keeper and the covenant-breaker. There is only this common ground: the inescapable revelation by God to all men that they are made in His image.

In Chapters 1 and 4, I do my best to make it clear that the starting point that Van Til spoke of has to do with the doctrine of God. Of course, it also has to do with the doctrine of God's creation of the universe out of nothing. It has to do with God's purposes that preceded the creation. Van Til was adamant about this. There is the central idea in his thought: the Creator-

creation distinction. He wrote: "The creation idea is an integral part of the Christian theistic system of thought. We accept it because it is in the Bible and we believe that which is in the Bible to be the only defensible philosophical position. Our opponents have no right to reject the creation story unless they can prove that it is not essential to Christianity or that Christianity is not the only position that makes human predication intelligible. Yet the ordinary textbook on philosophy presents the beginning of Greek speculation as something entirely neutral. But to try to be neutral is to speak against God and his Christ" (p. 19).

It is not just the ordinary textbook in philosophy that presupposes intellectual neutrality. It is every textbook assigned in the officially and legally religiously neutral but comprehensively biased tax-funded educational system in the United States and all other nations. Because the same textbooks are assigned in Christian colleges and universities, college students are universally instructed by means of printed materials written with an inherent anti-Christian bias. There is no such thing as neutral education. There is no such thing as value free-education. There is therefore no such thing as value-free economic theory. This was Van Til's argument throughout his career. You can see this in a collection of his articles that was published in 1971, *Essays on Christian Education*. He died in 1987.

It was my reading of his materials, beginning in 1962, that persuaded me to devote my calling to a reconstruction of economic theory that is based on a presupposition: the academic authority of the Bible. The Bible teaches the doctrine of God's creation of the universe out of nothing, and this doctrine affects every academic discipline to some extent. It deeply affects economic theory. That is why this four-volume book is like no other book on economics. It represents a self-conscious challenge to the humanistic presupposition (man's autonomy) and competing epistemologies of modern economists.

B. Re-Writing Van Til's Paragraphs

Here is my re-write of Van Til's two paragraphs which I used to begin this chapter. This shows how I understand what he wrote.

> According to Genesis 1, God has created the universe. God has created time and space. God has created all of the facts of science and all of the laws by which the universe operates. The facts of

> nature are not random. They are not impersonal. The laws of nature are not random. They are not impersonal.
>
> God has created the human mind. God actively has impressed the laws of thought according to which the mind must operate. These laws enable individuals to discover laws of nature and facts of nature. The laws of thought correspond to the laws of nature. The laws of mathematics correspond to the operations of inanimate nature. Mathematical laws also apply to some of the operations of human collectives. This is why insurance is possible. The mind is not the product of cosmic evolution. There has been no cosmic evolution. The mind is also not the product of biological evolution. There has been no human evolution. In short, the impress of God's plan is manifested in the whole creation: natural and human.
>
> All of this follows from point one of the biblical covenant: God's transcendence. This is manifested in His creation of the cosmos out of nothing. He also created Adam out of dust. God is sovereign. Man is not.

To show you what I am attempting to deal with, I refer to Eugene Wigner's essay, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences." It was published in a scholarly journal, Communications in Pure and Applied Mathematics, vol. 13, No. I (February 1960). It may still be posted on the Web here: http://bit.ly/WignerScience. Wigner won the Nobel Prize in physics in 1963. The title of his essay presents a logical dilemma. He wrote:

> Most of what will be said on these questions will not be new; it has probably occurred to most scientists in one form or another. My principal aim is to illuminate it from several sides. The first point is that the enormous usefulness of mathematics in the natural sciences is something bordering on the mysterious and that there is no rational explanation for it. Second, it is just this uncanny usefulness of mathematical concepts that raises the question of the uniqueness of our physical theories. In order to estab-

> lish the first point, that mathematics plays an unreasonably important role in physics, it will be useful to say a few words on the question, "What is mathematics?", then, "What is physics?", then, how mathematics enters physical theories, and last, why the success of mathematics in its role in physics appears so baffling.

Why is this success of mathematics baffling? Because mathematics has its own seemingly autonomous logic. Why should this realm of the mind be effective so often in describing the operations of physical nature? Wigner put it this way: "It is difficult to avoid the impression that a miracle confronts us here, quite comparable in its striking nature to the miracle that the human mind can string a thousand arguments together without getting itself into contradictions, or to the two miracles of the existence of laws of nature and of the human mind's capacity to divine them." Notice his selection of the word "divine" to describe our understanding of this correlation of mathematics and physics. Here are his closing words: "The miracle of the appropriateness of the language of mathematics for the formulation of the laws of physics is a wonderful gift which we neither understand nor deserve. We should be grateful for it and hope that it will remain valid in future research and that it will extend, for better or for worse, to our pleasure, even though perhaps also to our bafflement, to wide branches of learning."

This brings us to point two of the biblical covenant model: representation. Man is made in God's image. Therefore, he reflects God. As we learn in the dominion covenant (Genesis 1:26–28), man has authority over the creation. This authority was delegated to mankind by God. Man must use his mind to exercise dominion over nature. God designed his mind to enable him to do this.

Point two of the biblical covenant model relates to hierarchy. It also relates to revelation: nature's revelation of God and man's revelation of God. Christian philosophers have long argued that nature is a revelation of God. They derive this idea from what Paul wrote in Romans 1. "For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of people, who through unrighteousness hold back the truth. This is because that which is known about God is visible to them. For God has enlightened them. For his invisible qualities, namely his eternal power and divine nature, have been clearly seen, ever since the creation of the world, in the things that have been made. So they are without excuse" (vv. 18–20).

I now return to my re-write of Van Til's words. "God has revealed himself in nature, and he has also revealed Himself in the mind of man. Thus, it is impossible for the mind of man to function except in an atmosphere of revelation. And every thought of man when it functioned normally in this atmosphere of revelation would express the truth as laid in the creation by God. We therefore may call a Christian epistemology a revelational epistemology." Wait! This is not a re-write. This is exactly what he wrote. Now I must explain what he wrote in terms of the biblical covenant model.

C. The Covenant Model and the Foundations of Economics

The five chapters of Part 1 correspond to the five points of the biblical covenant model. I discuss this model in detail in Chapter 2. I do this in Chapter 2 rather than Chapter 1 because the biblical doctrine of the covenant is an aspect of point two of the covenant model. There are several reasons for this, but here is the main one: the Pentateuch follows this five-point covenant model. The books are Genesis (sovereignty), Exodus (authority), Leviticus (law), Numbers (sanctions), and Deuteronomy (inheritance). Exodus is book two of the Pentateuch. It is the book of the covenant. How do we know this? First, God gave the Ten Commandments to Moses, as God's representative (point two of the covenant) of Israel, in Exodus 20. God gave the case laws in Exodus 21–23. Second, the text says explicitly that this revelation is the book of the covenant. "He took the book of the Covenant and read it aloud to the people. They said, 'We will do all that the Lord has spoken. We will be obedient'" (Exodus 24:7).

Chapter 1 is "Presuppositions." Presuppositions are the starting point of all human thought. I learned this by reading Van Til, beginning in 1962 and continuing today. He developed an approach to philosophy called presuppositionalism. This system investigates covenant-breaking man's first principles of thought. Covenant-breaking man substitutes man's thought for God's thought. This substitutes human logic for the general revelation of God in nature, including man's nature, and also for the special revelation of God in the Bible. This being the case, the reconstruction of every area of man's thought must begin with substituting God's authoritative revelation in the Bible for man's presumed authoritative revelation without the Bible.

To show how this reconstruction can be done in every area of human thought, I have specialized in economics as an example. I begin with the Bible as the guide for this reconstruction. I begin with the five points. Chap-

ter 1 begins with presuppositions. These identify the sovereign truths of man's thought. Christian presuppositions are different from autonomous man's. Chapter 2 covers the covenant model. Chapter 3 deals with the inescapable connection between ethics and economic theory. There is no such thing as value-free economic theory, yet most humanistic economists insist that economic theory is (and should be) value-free. This is because they accept the myth of academic neutrality. Chapter 4 deals with epistemology: "What can man know, and how can he know it?" Why is this an aspect of point four? Because point four has to do with judgment. It therefore has to do with the final judgment: eternal sanctions. The doctrine of the final judgment should govern our discussion of truth and falsehood ethically, but also in every area of life. This is the issue of thinking God's thoughts after Him. It is therefore the issue of epistemology. Chapter 5 deals with the relationship between compound economic growth and finitude, especially the finitude of time. This culminates with the church's inheritance: Revelation 21 and 22. Nothing can grow forever in a cursed finite world. So, the growth process must either run out of living space and raw materials or else run out of time. Economists who defend compound economic growth, who are in the majority, have not faced up to this issue.

As always, the biblical covenant model governs my thinking. But it also governs the thinking of humanists. There is no escape from this model. We might as well accept this fact early in our careers. We cannot escape these five questions.

Who's in charge here?

To whom do I report?

What are the rules?

What do I get if I obey? Disobey?

Does this outfit have a future?

1

PRESUPPOSITIONS

Where is the wise person? Where is the scholar? Where is the debater of this world? Has not God turned the wisdom of the world into foolishness? Since the world in its wisdom did not know God, it pleased God through the foolishness of preaching to save those who believe. For Jews ask for miraculous signs and Greeks seek wisdom. But we preach Christ crucified, a stumbling block to Jews and foolishness to Greeks. But to those whom God has called, both Jews and Greeks, we preach Christ as the power and the wisdom of God. For the foolishness of God is wiser than people, and the weakness of God is stronger than people (I Corinthians 1:20–25).

Analysis

Paul was adamant: the natural man, meaning the covenant-breaker, is incapable of correctly understanding this world. He does not interpret what he sees in terms of the special revelation of the Bible. He invokes some other voice of authority. He speaks on behalf of the world in its wisdom. Paul insisted that the wisdom of this world is foolishness. In contrast to the world's wisdom is the power and wisdom of God. Covenant-breakers dismiss this wisdom as foolishness. It has no standing in their eyes, meaning no authority. [North, *First Corinthians*, ch. 1] A thousand years earlier, Solomon wrote this in the name of wisdom: "Now, my sons, listen to me, for those who keep my ways will be blessed. Listen to my instruction and be wise; do not neglect it. The one who listens to me will be blessed. He will be watching every day at my doors, waiting beside the posts of my doors. For whoever finds me, finds life, and he will find the favor of the Lord. But he who fails, harms his own life; all who hate me love death" (Proverbs 8:32–36).

In both of these cases, we see a clash of rival worldviews. Members of each group dismiss as foolish the professed wisdom of the other group. We see rival standards of wisdom. They have rival standards of foolishness.

Both standards cannot be wise. They are mutually exclusive. There is no way to reconcile these worldviews. The presuppositions governing each outlook are irreconcilable with the other's outlook. The arguments that each group's representatives make are irreconcilable.

This is why the presuppositions of every academic discipline should be stated at the beginning of any systematic discussion of the discipline. Yet this is never done. Academicians avoid any discussion of the presuppositions that undergird their disciplines. These presuppositions are implicit, but they are inescapable. Nevertheless, academic authors attempt to escape any responsibility for even announcing these presuppositions, let alone defending them philosophically. Part of this is because of a long-term strategy that humanists have used to undermine their opponents. But, in most cases, the practitioners of an academic discipline are unaware of either the philosophical foundations of the discipline or what I call the cosmological foundations of the discipline. They are uninterested in exploring these issues.

A. Van Til's Apologetics

Apologetics is the philosophical defense of the faith. I have been an adherent of the explicitly Calvinist philosophy of Cornelius Van Til ever since my senior year of college, 1962–63. I took his course in apologetics at Westminster Seminary in Philadelphia in 1963–64. In the summer of 1963, I became heavily influenced by R. J. Rushdoony when he hired me as a well-paid summer intern at the Center for American Studies. Before this, he had sent me one of Van Til's books in the fall of 1962. He had been a follower of Van Til ever since the spring of 1946, when he read Van Til's recently published criticism of the anti-biblical theological system known as neo-orthodoxy: *The New Modernism*. Rushdoony then made a detailed study of Van Til's writings. His first book was on Van Til's philosophy: *By What Standard?* (1959).

Van Til was a philosophical presuppositionalist. He argued that all men begin with presuppositions regarding the way the world works. These presuppositions are not provable by an appeal to man's autonomous logic, he argued. There is no such thing as autonomous logic or autonomous anything else, other than God. Men can think coherently only because they presume that their presuppositions about the world are true. Van Til denied the possibility of the self-proclaimed, self-contained logic of man: an unbroken and consistent development of a worldview from logically provable

presuppositions to logical conclusions. The rival presuppositions that undergird men's rival forms of logic cannot be proven by an appeal to any system of autonomous logic. All roads of logic lead back to one or another competing theory of origins, which announce the way the world works and therefore also the way that a person's perceptions and explanations of the world work. *The question of cosmic origins is therefore the crucial foundational aspect of men's thinking.* This is because the question of origins is the question of sovereignty. The child asks: "Who made God?" The first-year cosmology student may think this, but fear to ask in class: "What was there before the stuff that blew up in Big Bang?" These are the same question.

I come to a study of economics by way of the Bible's doctrine of God's sovereignty, which rests on the Bible's account the origin of the universe (Genesis 1). This means that I believe that the Bible is the voice of authority. It represents God in history. Logic is subordinate to the revelation of God in the Bible. This affirmation sets my approach to economics apart from humanistic schools of economics. This separation is based on a conflict between presuppositions and therefore between epistemologies. I offer a different answer to the question: "How do you know?" Put differently, this is the crucial question: "Who says?"

Christians must learn not to think of themselves as being dependent on intellectual scraps that fall from the humanists' epistemological table. The Canaanite woman knew better (Matthew 15:21–28). [North, *Matthew*, ch. 34] I did not write this book for non-Christians. I wrote it for Christians. I want my readers to be aware of the biblical alternative to the primary presupposition of humanism: the evolution of the cosmos and therefore also mankind. I want them to be able to participate in scientific endeavors without implicitly accepting Darwinism. If this is you, then I wrote this book for you.

B. Cosmic Origins and Sovereignty

The vast majority of modern academics are Darwinists, either explicitly (rare) or implicitly. This is true of economists. Ludwig von Mises and F. A. Hayek were both Darwinists. Hayek devoted considerable space in his writings to this topic. I discussed this in Appendix B of my book, *The Dominion Covenant: Genesis* (1982). A long section of it examines Hayek's Darwinism. I reprinted it in Volume 2 of *Sovereignty and Dominion*, the 2012 edition of my Genesis commentary. Other economists are not forthright about their

Darwinism. They do not self-consciously apply their implicit Darwininan theory of cosmic and social origins to their monographs and textbooks. Their Darwinism serves as a backdrop to their writing.

I am not speaking here of the tiny and peripheral late-nineteenth-century intellectual movement known as social Darwinism. That movement is thought to have had only two major defenders, both of whom were sociologists: the British scholar Herbert Spencer and the American professor William Graham Sumner. Spencer became an evolutionist before Darwin's famous book. He coined the phrase, picked up by Darwin in a later edition, "the survival of the fittest." Neither he nor Sumner was a social Darwinist. Social Darwinists justified the free market's system of competition by an appeal to biological competition: "nature red in tooth and claw." As an intellectual movement, it had few supporters. Both Sumner and Spencer believed that the free market is a social arrangement for peace and voluntary cooperation, not conflict. Mises agreed. He wrote against social Darwinism in *Human Action* (1949). "Reason has demonstrated that, for man, the most adequate means of improving his condition is social cooperation and division of labor. They are man's foremost tool in his struggle for survival. But they can work only where there is peace. Wars, civil wars, and revolutions are detrimental to man's success in the struggle for existence because they disintegrate the apparatus of social cooperation" (VIII:8:2).

If most economists are Darwinists, then the debates between the schools of economic opinion are at bottom arguments "within the camp." Economists argue about the proper institutional arrangements for any society to make productive use of scarce resources, including the knowledge of how to use these resources. I am arguing for a radically different approach to economics. Economic theory must not begin with Darwinian theories of cosmology: cosmic chance vs. unbreakable cosmic laws. Instead, it must begin with the related doctrines of God's creation of the universe out of nothing and His providential administration of the creation. Christian economics must begin with the doctrine of the sovereignty of God, not the doctrine of the sovereignty of the evolving cosmos. Therefore, it must not begin with the Darwinian economists' derivative presupposition of the sovereignty of man, either individual man or collective man. I have spent the last half century developing this idea of these two incompatible rival presuppositions in social theory in general, but especially economic theory. This is why I am devoting Part 1 of this book to a consideration of foundations. It is why I

wrote the *Student's Edition* in terms of three approaches to economic theory: pre-fall (covenant-keeping), post-fall (covenant-breaking), and redemptionist (covenant-keeping).

C. Strategically Silent Academics

If you locate foundational books in any field of scholarship, which are exceedingly rare, you will not find one that begins with the doctrine of cosmic origins. A book may discuss certain presuppositions about the nature of man or logic. It will not discuss the relationship between the author's presuppositions regarding the origin of the universe and man's role in the universe. Instead, the author will write as though there were universal agreement on this topic. He assumes that he can begin discussing specific issues of his chosen academic discipline. He is not forthright about his views regarding the crucial five issues of social science: sovereignty, authority, law, sanctions, and time. He is probably unaware of the centrality of these issues. I have spent over three decades arguing that these five issues are implications of God's creation and His subsequent delegation of derivative, limited sovereignty to man as part of the dominion covenant.

The Bible makes it clear that the fundamental presupposition that the Christian must begin with is the doctrine of God's creation of the universe out of nothing. The Christian should also make clear that the God of creation is a Trinitarian God. This is what distinguishes Christianity from Judaism and Islam. Yet it is exceptionally rare for any Christian scholar to begin his discussion of any aspect of his academic discipline in terms of the doctrine of creation. Van Til began his books with a discussion of what he called the Creator-creature distinction. This was central to his apologetic method, meaning his philosophical approach to understanding reality. It is not central to modern Christian scholarship. It should be.

The silence of the academics, whether Christian or humanistic, regarding the relationship between the doctrine of origins and their specific academic disciplines works to the advantage of covenant-breakers. This silence confuses the reader. The reader does not understand how fundamental the doctrine of origins is. He is not taught this in school. He does not read this in specialized works of scholarship. *The doctrine of origins is always the starting point for a consistent doctrine of sovereignty.* Who is sovereign in history? Is it the Trinitarian God of the Bible? Is it some other god? Is it autonomous man? Is it the impersonal evolutionary process that will ultimately destroy

all life, all purpose, and all meaning in the inescapable heat death of the universe? These are fundamental questions. They are foundational questions. Yet these questions are never raised in monographs, textbooks, scholarly articles, and those exceedingly rare intellectual exercises, treatises.

Any discussion of epistemology should come after a discussion of the origin of the universe. This is because *the question of origins is the question of sovereignty*. Social thought, if it is to be consistent, must always discuss these five points: sovereignty, authority, law, sanctions, and time. Put differently, these are sovereignty, hierarchy, ethics, causation, and time. *Sovereignty must always comes first*. In modern scholarship, and in most Christian scholarship through the ages, the doctrine of sovereignty is left unstated. This silence benefits covenant-breaking scholarship at the expense of covenant-keeping scholarship. It relegates to the realm of irrelevance the fundamental question of existence: "Who's in charge here?" The Bible is clear: the God who created the cosmos out of nothing is in charge.

Immanuel Kant has been the dominant philosopher in the West for over two centuries. His intellectual categories shape social philosophy, including economic theory. He was a cosmic evolutionist. He wrote *Universal Natural History and Theory of the Heavens* in 1755. He wrote it anonymously. In the Preface, he declared: "I accept the matter of the whole world at the beginning as in a state of general dispersion, and make of it a complete chaos. I see this matter forming itself in accordance with the established laws of attraction, and modifying its movement by repulsion." Out of chaos came order through unbreakable laws. The universe was self-created. It is autonomous. Man is therefore autonomous. Modern Big Bang cosmology is essentially Kant's cosmology with equations.

Few social theorists understand the extent to which they are Kant's disciples. Nonexistent is the textbook and rare is the treatise that discusses the author's assumptions regarding epistemology, which is the question of what men can know and how they can know it. The treatise by Mises, *Human Action*, is an exception. Mises devoted the first hundred pages to epistemology. He did not discuss in detail the fundamental issue of epistemology, namely, the relation of external reality to the mind of man. He did not use the terminology of Immanuel Kant: *noumenal* and *phenomenal*. He did not cite passages in Kant's works or works written by disciples of Kant. He did at least briefly discuss the supreme issue raised by Kant: the nature of the connection between the autonomous mind of man and the equally au-

tonomous external realm of nature. I discuss this in Section D of Appendix A: "Reason: Deductive." Mises insisted, as Kant had, that, "The logical structure of the human mind creates the reality of the action." The human mind is therefore authoritative. But man's mind itself is dualistic. It is somehow unstructured (indeterminate freedom of choice) and also the source of structure (logic and mathematics). How can this be? Kant did not say. Therefore, Mises did not say. In short, he did not explain his *a priori* presuppositional epistemology of economic reasoning in terms of the philosophy of Kant, who suffered from the same dualism. He simply assumed it. I discuss this in greater detail in Chapter 4, Section E. I single out Mises for two reasons. First, I am familiar with his writings on economic epistemology. Second, he was almost alone in his detailed discussion of economic epistemology.

D. The Myth of Neutrality

Scholars begin with an implicit assumption: *everyone agrees on the basics*. This includes the basics of the origin of the universe, the cause-and-effect relationships that presently govern the universe, the logical structure of the human mind, the ability of men to perceive the cause-and-effect relationships in the external world, and a multitude of other related assumptions. Here is the problem: there is no agreement on the basics outside of academia. Different worldviews have different interpretations of these issues. *There is no common logic of human reason*. That is because there is no agreement on the covenantal issues of God, man, ethics, sanctions, and time.

Because humanistic authors rarely write treatises, they do not discuss at the beginning of their treatises what their views are regarding God, man, ethics, sanctions, and time. They also do not explain their concepts of sovereignty, authority, law, causality, and time. Instead, they begin discussing specialized issues of their academic discipline—issues that are implicitly based on the unstated presuppositions that undergird the worldview of each author. The authors assume the existence of intellectual and moral neutrality. This assumption has been basic to the justification of tax-funded education since at least 1800. *Modern education is based on the myth of neutrality*. But Jesus taught that there is no neutrality. Men are either with him or against him. "The one who is not with me is against me, and the one who does not gather with me scatters" (Matthew 12:30).

The myth of neutrality began no later than classical Greek humanism. It began with pre-Socratic philosophers five centuries before the birth of Christ. The assumption of the myth of philosophical and ethical neutrality has been crucial in the long-term strategy of humanists to undermine all theological worldviews other than humanism's theological worldview. Humanism's worldview is intensely theological. It has very definite ideas about God, man, ethics, sanctions, and the final judgment: the end of history. These ideas are contrary to what the Bible teaches about all five topics.

Humanists have gained tremendous financial support for academic institutions run by humanists and funded by taxpayers. The moral and rhetorical justification for tax funding is this: there is agreement among all schools of opinion on the fundamental issues that are important to academia. One of these assumptions is this: *the God of the Bible is irrelevant to academic topics*. When it comes to formal classroom education, most Christians agree with the humanists on this point. This is why they are defenders of tax-funded education. The Christians' compromise with the myth of neutrality goes back to the second century A.D. Christian scholars attempted to defend the gospel by invoking Greek philosophers. This tradition was extended in the medieval world by Christian philosophers, most notably Thomas Aquinas.

If there is a single issue that divides the Christian worldview from all rival worldviews it is this: *the doctrine of God's creation of the universe out of nothing*. This is the historical and cosmological foundation of the Christian doctrine of sovereignty. It is irreconcilable with the humanists' concept of the origin of the universe as the Big Bang, which supposedly took place 13.7 billion years ago. They do not explain where the original stuff that blew up came from. They conveniently ignore that topic.

E. Courts of Appeal

Men who are committed to a specific worldview must deal with specific aspects of the covenant structure. They must offer specific content to each of the biblical covenant's five categories: God, man, law, sanctions, and the final judgment. Cosmic evolutionists offer a theory of a final court of appeal: the heat death of the universe. It will be impersonal. The history of the universe will be from the impersonal Big Bang to the impersonal heat death of the universe. This will be the ultimate ashcan of history, to use a phrase made famous by the Russian Marxist theorist and revolutionary Lev Bron-

stein, who took the name Leon Trotsky. Darwinists prefer not to talk about this aspect of cosmology. It is too depressing. The heat death of the universe is the final triumph of death over life, time, and meaning. There is no higher court of appeal for the evolutionist. I discussed this in Chapter 2 of my book, *Is The World Running Down?* (1988). I reprint it in this book as Appendix B. I also discuss it in Chapter 6 of *Christian Economics: Student's Edition*.

Christianity teaches a doctrine of the final judgment. It is presented in Matthew 25. Jesus, in His capacity as the Second Person of the Trinity, is omniscient. He will judge everyone in terms of his words and his deeds. "When the Son of Man comes in his glory and all the angels with him, then he will sit on his glorious throne. Before him will be gathered all the nations, and he will separate the people one from another, as a shepherd separates the sheep from the goats" (vv. 31–32). Here is the permanent outcome: "These will go away into eternal punishment, but the righteous into eternal life" (v. 46). There is no higher court of appeal. This will be the visible triumph of life over death. It will be the eternal affirmation of time and meaning: from creation to final judgment.

In humanism's economic theory, there are rival theories of what constitutes the earthly court of appeal. Free market economists identify this final court as the market process. Consumers decide what to buy and what not to buy with their money. Their independent assessments lead to either profit or loss for sellers. This is a system of economic sanctions. In contrast, socialist economists identify the earthly court of appeal as the state, meaning agents of state bureaucracies that are part of the national program of central economic planning. Bureaucrats decide at the end of the planners' specified period of production which producers receive bonuses or promotions, and which ones do not. This is a system of political sanctions. In between these two systems are Keynesian theorists. Their system is a system of pricing based mainly on the market process, but governed from the top by two groups: politicians who decide to run national government budget deficits of varying sizes, and central bankers who influence the supply of money by buying or selling government debt issued by national governments.

The rival worldviews of free market economists and socialists cannot be reconciled. The first major economist to argue this point was Mises, who wrote a long essay in 1920: "Economic Calculation in the Socialist Commonwealth." Mises argued that, lacking market-generated prices, central

planners could not know what goods and services are desired by consumers. Without prices for capital goods, planners would not know the economic value of specific tools of production. They would have to rely on prices in non-socialist societies. This article was generally ignored by economists. There were initial supporters in Europe among younger socialists who abandoned their commitment to socialism, most notably Hayek, but interest in Mises' theory of the inherent irrationality of socialist planning faded in the 1930s. It became one of the two cornerstones of Austrian School economics, along with Mises' business cycle theory, which was based on central bank operations to increase or decrease the money supply.

F. The Logic of Economics

I have argued that rival covenantal presuppositions about the nature of God, man, law, sanctions, and time lead to rival concepts of sovereignty, authority, law, sanctions, and time. Yet I have also argued that the policy conclusions of humanistic economists, especially Austrian School economists, are similar to the policy recommendations that I have presented for over five decades. How can this be if my logic is consistent? Shouldn't rival presuppositions lead to rival economic policies?

We are now back to the observation made by Rushdoony in 1959 in his book on Van Til's philosophy, *By What Standard?* I quoted it in the Introduction. Covenant-breakers are like rustlers in the Old West in the United States. They swing wide ropes. "The natural man has valid knowledge only as a thief possesses goods." Van Til put it this way: "The natural man must not be encouraged to think that he can, in terms of his own adopted principles, find truth in any field. He must rather be told that, when he finds truth, even in the realm of the 'phenomenal,' he finds it in terms of principles that he has 'borrowed,' wittingly or unwittingly, from Christianity. The fact of science and its progress is inexplicable except upon the presupposition that the world is made and controlled by God through Christ and that man is made and renewed in the image of God through Christ."

I have long used analytical categories of Austrian School economics. But I have not used them because of Mises' *a priori* epistemology, which I do not accept. I explained why as far back as 1976 in my article, "Economics: From Reason to Intuition." I reprinted it as an appendix in *The Covenantal Structure of Christian Economics*. I reprint it as Appendix A in this book. Major Austrian School categories are taught in the book of Genesis: pur-

pose, planning, private property, entrepreneurship, profit and loss, and economic growth. The Austrians' hostility to inflation was announced by the prophet Isaiah: "Your silver has become impure, your wine mixed with water" (Isaiah 1:22). [North, *Prophets*, ch. 3] I have grounded my opposition to fractional reserve banking on the Book of Exodus. "If you take your neighbor's garment in pledge, you must return it to him before the sun goes down, for that is his only covering; it is his garment for his body. What else can he sleep in? When he calls out to me, I will hear him, for I am compassionate" (22:26–27). [North, *Exodus*, ch. 49:J] If a man has pledged his cloak as collateral, he can only pledge it to one lender. A second lender cannot collect the cloak when the first lender already has it. This is like fractionally reserved banks, which issue more fiat money loans to borrowers than the bank has in reserve.

I have a different starting point for my epistemology, i.e., my theory of truth. I begin with the Bible, not with the writings of Mises, Hayek, and Rothbard. I have made productive use of many of their economic discoveries, but I am not dependent on Immanuel Kant, as Mises and Hayek were, or on Thomas Aquinas, as Rothbard claimed to be in the area of ethics, although not economic theory. Rothbard claimed, following Mises, that economic theory is value-free. This has been the claim of all schools of academic economic thought, except the Marxists, since the 1870s.

Conclusion

When I began college in 1959, I had no one to go to for guidance in these matters. I did not know of Van Til. I did not hear of Rushdoony until the spring of 1962, when I read *Intellectual Schizophrenia* (1961). I met him that summer at a two-week conference for conservative undergraduates. After the conference, he sent me one of Van Til's books, but I do not remember which one. It was a spiral-bound syllabus. It was not *The Defense of the Faith,* which was published in a revised edition in 1963, which I read that summer, before I went to Westminster Seminary in the fall. In early 1962, I was committed to Mises' humanistic *a priorism*. Then I learned about biblical *a priorism*. That changed my thinking and my life. I spent the summer of 1963 reading Mises' most important books, and also Rothbard's *Man, Economy, and State*. In seminary the following spring, I wrote a term paper for Van Til on Rothbard's epistemology, which was Mises' *a priorism*. I had abandoned it in 1962.

For readers who are unfamiliar with these issues, I recommend Van Til's book, *A Survey of Christian Epistemology* (1969). Next, read Greg Bahnsen's collection of extracts from Van Til's writings, plus Bahnsen's comments: *Van Til's Apologetic* (1998). Then read Bahnsen's book, *Presuppositional Apologetics: Stated and Defended* (2008).

2

THE COVENANT MODEL

God said, "Let us make man in our image, after our likeness. Let them have dominion over the fish of the sea, over the birds of the sky, over the livestock, over all the earth, and over every creeping thing that creeps on the earth." God created man in his own image. In his own image he created him. Male and female he created them. God blessed them and said to them, "Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth" (Genesis 1:26–28).

Therefore keep the words of this covenant and do them, so that you may prosper in everything that you do (Deuteronomy 29:9).

Analysis

God created man on day six. Before He did this, He had a purpose for mankind: dominion in history by covenant-keepers. Mankind would represent God to the creation in God's name (legal) and on God's behalf (economic). *Purpose precedes planning.* Purpose is an aspect of God's decree for the creation. The apostle Paul revealed what this purpose was.

> God chose us beforehand for adoption as sons through Jesus Christ, according to the good pleasure of his will. Our adoption results in the praise of his glorious grace that he has freely given us in the One he loves. In Jesus Christ we have redemption through his blood and the forgiveness of sins, according to the riches of his grace. He lavished this grace upon us with all wisdom and understanding. God made known to us the hidden purpose of his will, according to what pleased him, and which he demonstrated in Christ, with a view to a plan for the fullness of time, to bring all things together, all things in heaven and on

> earth, under one head, even Christ. In Christ we were appointed as heirs. We were decided on beforehand according to the plan of him who works out everything according to the purpose of his will (Ephesians 1:5–11).

Before God created man, He announced His plan for man. Mankind would be male and female. Jointly, they would fulfill God's plan of dominion (Genesis 1:26–28). [North, *Genesis*, ch. 3] They would rule over plants and animals. They would rule over the creation. He announced their dominion assignment. "Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth" (v. 28b). Next, He provided capital in the form of *delegated ownership* to enable them to fulfill this assignment. "God said, 'See, I have given you every plant yielding seed which is upon the surface of all the earth, and every tree with fruit which has seed in it. They will be food to you. To every beast of the earth, to every bird of the heavens, and to everything that creeps upon the earth, and to every creature that has the breath of life I have given every green plant for food.' It was so" (Genesis 1:29–30). In review, God provided raw materials before He created humans. Then He gave humans life. Then He transferred raw materials to them. This sequence is the first example in the Bible of this fundamental principle: *grace precedes law*. [North, *Genesis*, ch. 4]

He brought them into a covenantal relationship with Him. As I will show in this chapter, this covenant had a structure: *sovereignty, authority, law, sanctions, and inheritance*. This structure was revealed chronologically. First, He created them. This was the essence of His sovereignty over them. Second, He gave them an assignment: administer the resources. He possessed authority over them. He delegated assets to them. Third, He gave them an ethical command. "From the tree of the knowledge of good and evil you may not eat'" (Genesis 2:17a). Fourth, to this command He attached a negative sanction for disobedience. "On the day that you eat from it, you will surely die" (v. 17b). [North, *Genesis*, ch. 9] Fifth, He announced a law of dominion through generational separation through time. "Therefore a man will leave his father and his mother; he will be united to his wife, and they will become one flesh" (v. 24). [North, *Genesis*, ch. 13]

The covenant model is basic to Christian theology. It provides an explicitly Bible-based structure for Christian theology. This structure is derived

from the structure of the Bible, beginning with the creation story. It structures the sequence of the Pentateuch: Genesis (origins/sovereignty), Exodus (authority/hierarchy), Leviticus (ethics/law), Numbers (oath/sanctions), and Deuteronomy (covenant renewal/inheritance). It also provides the structure for Christian social theory in general. This structure is basic to Christian economics, as I have shown in Volume 1: *Student's Edition*.

The Book of Deuteronomy is the book of covenant renewal. It is also the book of inheritance. Moses was the last survivor of the generation of the exodus from Egypt. He outlived his brother Aaron (Numbers 20:28). In Deuteronomy, we have the record of his long speech to the generation of the conquest. First, He surveyed the history of the exodus and the years in the wilderness. This included God's imposition of the Ten Commandments (Exodus 20), which Moses recapitulated in Deuteronomy 5. [North, *Deuteronomy*, ch. 13] Then he announced this. "Now these are the commandments, statutes, and decrees that the Lord your God has commanded me to teach you, so that you might keep them in the land that you are going over the Jordan to possess; so that you might honor the Lord your God, so as to keep all his statutes and commandments that I am commanding you—you, your sons, and your sons' sons, all the days of your lives, so that your days may be prolonged. Therefore listen to them, Israel, and keep them, so that it may go well with you, so that you may greatly multiply, in a land flowing with milk and honey, as the Lord, the God of your fathers, has promised you would do" (Deuteronomy 6:1–3). [North, *Deuteronomy*, ch. 14] These statutes and commands were the words of the covenant. He had announced this to their parents. "He took the book of the Covenant and read it aloud to the people. They said, 'We will do all that the Lord has spoken. We will be obedient'" (Exodus 24:7). They had broken God's laws repeatedly. They had wandered for 40 years in the wilderness. So, Moses warned this generation: "Therefore keep the words of this covenant and do them, so that you may prosper in everything that you do" (Deuteronomy 29:9). [North, *Deuteronomy*, ch. 71] Here, in just one sentence, is God's law of prosperity. This is a law of Christian economics. It is not a law of humanistic economics, but it should be.

A. The Five Points: A History

Sections A and B are taken from the Preface to my book, *The Covenantal Structure of Christian Economics* (2nd edition, 2018). I reproduce this ma-

terial here because I am well aware that some readers have not read that book, do not intend to buy that book, or cannot locate a free PDF of that book. This information is crucial to my concept of Christian economics.

The most important influence in my thinking after I began writing my economic commentary was Ray Sutton's development of the five-point covenant model. An early variant appeared in Meredith Kline's 1963 commentary on Deuteronomy, *Treaty of the Great King*. He in turn got the idea for this from George Mendenhall, who wrote about it in 1954.[11] Sutton's book was far more developed than Kline's. I helped him edit the manuscript in 1986 and 1987. It went through several major revisions before my Institute for Christian Economics published it in 1987: *That You May Prosper: Dominion By Covenant*. Sutton presented the covenant model in this form:

1. God (transcendent, yet immanent)
2. Hierarchy
3. Ethics
4. Sanctions
5. Continuity

A reader recommended this restructuring:

1. **T**ranscendence/presence
2. **H**ierarchy
3. **E**thics
4. **O**ath
5. **S**uccession

The acronym is THEOS, the Greek word for God.

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1. George Mendenhall, "Covenant Forms in Israelite Tradition," *Biblical Archaeologist*, vol. 17 (1954), pp. 50–76. Mendenhall, *Law and Covenant in Israel and the Ancient Near East* (Pittsburgh: The Presbyterian Board of Colportage of Western Pennsylvania, 1955). For a detailed analysis of his thesis, see René Lopez, "Israelite Covenants in the Light of Ancient Near Eastern Covenants, Part 1," *CTS Journal*, vol. 9 (2003) (http://bit.ly/LopezCovenants1) *ibid*. Part 2, vol. 10 (2004). (http://bit.ly/LopezCovenants2)

In my 1980 book, *Unconditional Surrender: God's Program for Victory*, I instinctively adopted the first three: God, man, and law. In the third edition, published in 1988, I added time. In the 2010 edition, I completed it by adding sanctions. I hope that this is the final edition. Here are the five inescapable components of covenant theology

1. God
2. Man
3. Law
4. Sanctions
5. Time

This structure is visible in the structure of the Pentateuch.

1. Genesis (origins)
2. Exodus (authority)[22]
3. Leviticus (law)[33]
4. Numbers (sanctions)
5. Deuteronomy (inheritance)[44]

I put all this into one short (for me) book: *God's Covenants* (2014). [http://bit.ly/5covs] I also discussed the five covenants in history: dominion, individual, family, church, and state. This laid the foundation for my identification of the five inescapable factors in all social theory.

2. The book is divided into five sections: (1) sovereign God (1–17); (2) judicial appeals courts (18); (3) laws (21–23:13); (4), oath (23–24); (5) inheritance (25–40). The Ten Commandments are two sets of five points each: priestly, kingly.

3. The book is divided into five sections: (1) five sacrifices (Leviticus 1–7); (2) priestly, hierarchical cleansing of God's house and man's house, including the land—a means of deliverance (Leviticus 8–16); (3) laws of separation (Leviticus 17–22); (4) covenant-renewal festivals and covenant-breaking acts (Leviticus 23–24); (5) inheritance (Leviticus 25–27). The five sacrifices are structured in terms o the covenant.

4. The book is divided into five sections: (1) transcendence (1:1–5); (2) hierarchy (1:6–4:49); (3) ethics (5–26); (4) sanctions (27–30); and (5) continuity (31–34)

1. Sovereignty
2. Authority
3. Law
4. Sanctions
5. Succession

B. Economics: Five Points Times Four

I begin with God. Here are the theocentric judicial principles of economics in 15 words.

Judicial (theocentric)

1. God owns everything.
2. God delegates ownership.
3. God prohibits theft.
4. God evaluates performance.
5. God mandates growth.

God designates men as His trustees. As trustees, they are authorized to act in God's name as judicial representatives. Here are the rules of trusteeship in 15 words.

Judicial (representative)

1. Owners are trustees.
2. Trustees possess authority.
3. Trusts are binding.
4. Trustees are accountable.
5. Trustees designate successors.

There are also economic aspects of delegated ownership. God requires men to act as stewards. These are responsibilities of property management. Men must act on God's behalf. They must put His interests above their own. The laws governing men's stewardship are structurally the same as God's

laws of ownership, but suitable for creatures. Here are the rules of stewardship in 15 words.

Stewardship Laws

1. Purpose precedes planning.
2. Priorities structure planning.
3. Ownership involves exclusion.
4. Owners evaluate performance.
5. Owners designate heirs.

Trusteeship has two aspects: judicial and economic. The judicial aspect is a matter of guardianship. The economic aspect is stewardship. This distinction goes back to God's designation of Adam as His trustee over the creation. The garden was Adam's testing place. God told Adam to dress the garden and keep it (Genesis 2:15). [North, *Genesis,* ch. 9] Stewardship was economic. Guardianship was legal. Stewardship involved *increasing the value of the property*. This is the meaning of "dress." Guardianship involved *defending God's property from unlawful invasion*. This is the meaning of "keep." Other translations translate "keep" as "work." Stewardship is trusteeship *on behalf of.* Guardianship is trusteeship *in the name of.* Both responsibilities are aspects of ownership: God's original ownership and man's delegated ownership.

Ownership is an inescapable concept. It is never a question of hierarchical ownership vs. no hierarchical ownership. It is always a question of who is the supreme owner. *This structure of ownership leads to laws of economics*. These laws are not autonomous. They are the results of God's covenantal ownership. These laws govern the structure of production. Here are these laws in 15 words.

Economic Laws

1. Owners adopt purposes.
2. Prices provide information.
3. People prefer more.
4. Scarcity imposes costs.
5. Growth reduces scarcity.

C. Judicial (Theocentric)

Introduction

I argue in this section that God's Bible-revealed law lays the foundation of economic laws. More fundamentally, I argue that biblical covenants are superior in authority to any contract. Contracts are not sealed by a public oath before God. Biblical covenants are. They are holy. There are contractual aspects of covenants, but calling them contracts is misleading. Couples publicly say marriage vows. To speak of a marriage contract is misleading.

Because I take this view, I argue this: *the judicial aspects of ownership are superior to the economic aspects of ownership*. Christian economists should begin with the concept of ownership as primarily judicial and secondarily economic. This is the opposite of what humanistic economists presuppose. They believe that economic theory is autonomous. Therefore, its truths do not rest on a theory of law. Academic economists never explicitly announce this operational but implicit presupposition in their textbooks and treatises. Nevertheless, this presupposition regarding the judicial autonomy of economic theory permeates all of humanism's economic theory. This is why they begin their analyses with some aspect of scarcity, not ownership. I do not.

1. God Owns Everything

I devote Chapter 1 of *The Covenantal Structure of Christian Economics* to this topic: "The Judicial Sovereignty of God." Here is where Christian economics departs from humanistic economics: at the beginning. I do not mean merely the beginning of economic analysis. I mean the beginning of time: the creation. The universe began with God's creation. So, not only is God in the picture, but He is sovereign. He is sovereign because He created the universe out of nothing. In doing this, He thereby established full ownership of the earth. "The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers" (Psalm 24:1–2). [North, *Psalms*, ch. 5] Therefore, Christian economics announces: "God owns everything."

God's sovereignty precedes man's authority. God delegated authority to man. This can legitimately be described as limited sovereignty. In this sense, it is like delegated ownership: limited. But God was sovereign before He created man. He created the cosmos before man appeared on the scene. God's

ownership is original. It is based on His creation of everything out of nothing. This is why man's ownership stems from God's original ownership. There is delegated ownership from God to mankind.

God was not dependent in any way on the cosmos. He extended His sovereignty over it, day by day, in the creation week. This was not economic sovereignty. He was not making exchanges. He was not limited by scarcity. He did not have to give up ownership of anything in order to gain ownership over something else. The question arises: "How was His sovereign ownership established?" By His words, day by day. *This was judicial sovereignty, not economic sovereignty.*

2. God Delegates Ownership

The story of the creation week includes the dominion covenant that God established with mankind through Adam. This was the judicial basis of point two: "God delegates ownership."

This is the legal basis of all ownership. Man is not autonomous. Man answers to God. This means that individual men and also institutions answer to God.

I began this chapter with the dominion covenant (Genesis 1:26–28). This was a covenant. God made it verbally on behalf of mankind. God said, "Let us make man in our image, after our likeness. Let them have dominion over the fish of the sea, over the birds of the sky, over the livestock, over all the earth, and over every creeping thing that creeps on the earth" (v. 26). This was before He created them. Next, He created them. He then announced His assignment to them as *judicially representative agents*. "God created man in his own image. In his own image he created him. Male and female he created them. God blessed them and said to them, 'Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth'" (vv. 27–28). They did not affirm this covenant. They were not yet created.

This was a legal transfer of property. It was necessarily a legal transfer of authority. *Ownership always involves legal authority*. This transfer was legally representative. Adam and Eve legally represented all humanity. This is why, after they rebelled, God placed the negative sanctions of death, cursed scarcity, and painful childbirth on the children of Adam and Eve. Original sin was and is judicial/covenantal.

Mankind's ownership is derivative. It is based on a covenant. This covenant was judicial. It remains judicial. This is why any discussion of ownership is inherently judicial. More than this, *ownership is primarily judicial*. This is why I place the concept of judicial trusteeship above the doctrine of economic stewardship. Because God is sovereign, I place original ownership above representative ownership. God's sovereignty is superior to man's authority.

3. God Prohibits Theft

God's delegation of ownership also raised the issue of property rights: God's ownership of the forbidden tree. Men were not to eat from it. This is the basis of point three: "God prohibits theft." This was not stated in the dominion covenant in Genesis 1. The words in Genesis 1 did not involve a prohibition and its associated negative sanctions. The covenant document was completed by God in Genesis 2. "But from the tree of the knowledge of good and evil you may not eat, for on the day that you eat from it, you will surely die" (2:17). The stipulation is in the first half of the sentence. The sanction is in the second half.

This stipulation was an aspect of point three of the biblical covenant. It placed a legal boundary around a forbidden tree. This legal boundary identified the tree as forbidden. They were not to eat from it. It did not belong to them. It belonged to God. Any violation of that boundary would result in the negative sanction of death. *This stipulation is the origin of private property*. It was judicial in origin. It was not economic in the sense of profit and loss. It was not a capital asset. Rather, it was judicial in the sense of profit and loss. There was a potential profit: the knowledge of good and evil. Adam and Eve would become as God, the serpent promised. This was a judicial goal. There was a potential for loss: death imposed by God, the judicial owner of the tree. From God's point of view, there was nothing economic about the arrangement. This was not part of the market process. It was strictly judicial. That is to say, it was strictly covenantal. God had nothing to lose. He also had nothing to gain. That is because God is sovereign; man is not. God is not governed by scarcity; man is.

Here is my main point: *ownership is primarily judicial. It is secondarily economic*. It is therefore conceptually incorrect to begin economic analysis with a discussion of scarcity. It should begin with ownership. This is true of humanistic economics as well as Christian economics.

4. God Evaluates Performance

God the Father sits on the throne of judgment (Revelation 20:11–15). Jesus sits at His right hand (I Peter 3:21–22). This is a judicial matter: God's high court. God declares men's guilt or innocence. Theologians call this judicial declaration *imputation.* But the concept of imputation applies to more than judicial performance. It applies to economic performance, aesthetic performance, and all other kinds of performance. God's imputation is authoritative. There is no appeal beyond it.

The negative sanction of death was an indicator of God's judicial sovereignty over them. He had already judged His work on the first six days. He announced that His work was good. He would henceforth judge mankind's performance, day by day, just as He had verbally judged His own performance at the end of each day of the creation week, except for day two. Therefore, we can say that God evaluates performance.

There were twin sanctions: profit and loss. The main profit was never mentioned by God: *eating from the tree of life.* This would have been a communion meal. Mankind would have gained the positive sanction: eternal life without any possibility of death, and therefore also with no possibility of sin. That would have ended God's test. So great was this profit opportunity that, after man's fall and his condemnation by God, God placed a flaming sword in front of the garden, so that man could not enter the garden and eat from the tree of life (Genesis 3:24).

God's silence regarding the tremendous profit associated with the tree of life indicates that the key covenantal issue in the garden was property rights. Specifically, it was God's property rights. What was covenantally relevant was the legal boundary around the forbidden tree. *Legal boundaries are associated with point three of the covenant.* We can see their importance by the magnitude of the negative sanction that God imposed on Adam and the sons of Adam: death. The New Testament makes this even clearer. It is only in the New Testament that we read about the ultimate negative sanction: the lake of fire (Revelation 20:14–15).

Knowing good and evil was an aspect of judgment, meeting point four of the covenant. *The lure of the forbidden tree was primarily judicial, not economic.* The serpent did not tell them that the forbidden fruit would taste really good. He told them that they could become as God, knowing good and evil. This was all about *judicial imputation*, not economic imputation. This is why I conclude that the judicial aspect of trusteeship is more funda-

mental than the economic aspect. The story of the sequence of the fall of man proves this.

Even without a communion meal at the tree of life, there was another source of profit: their ownership of all the trees in the garden and all the world outside the garden. Adam ignored this arena of economic profit, once Eve tested him. Adam in rebellion saw his potential profit solely as the result of eating from the forbidden tree and thereby becoming as God judicially. *He wanted to escape his own finitude*. He thought that a meal at the forbidden tree would give him this benefit. He chose a communion meal with the would-be god represented by the serpent: Satan. This is why the temptation was not primarily about economics. It was about covenantal authority. *This is why economic theory is subordinate to covenantal theory*. It is why covenantal theory, which is primarily judicial, should be the starting point of economic theory and all of the other social sciences and humanities.

5. God Mandates Growth

God told mankind to multiply. Conclusion: "God mandates growth." The multiplication process was biological. But biological multiplication necessarily has an economic implication associated with it: *per capita wealth*. If the number of people expands, then non-human wealth must expand with it in order to avoid the progressive impoverishment of individuals.

God told them that they could eat from any tree in the garden. This included the tree of life, but God did not say this explicitly. Anyway, the text does not reveal such a revelation, and I assume that He remained silent. He expected Adam and Eve to figure this out. They did not. There is a familiar English phrase associated with such blindness: *their inability to see what was right under their noses*. They were not initially blind judicially. They were not under the bondage of sin. They could have seen this. But they did not see it after the temptation. They did not even look for it. All they saw was the forbidden tree. They wanted to eat from it. They wanted this more than anything else.

The issue of economic growth is secondary to the issue of the extension of mankind's judicial dominion. *The issue of dominion over the earth has historically been the issue of an expanding population*. This was set forth clearly in the dominion covenant. We need human beings to exercise judgment. They must exercise economic judgment. This is an aspect of economic growth. *But the primary aspect of dominion is ethical/covenantal*. We can see this in the words of Paul: "Do you not know that the believers will judge

the world? If then, you will judge the world, are you not able to settle matters of little importance? Do you not know that we will judge the angels? How much more, then, can we judge matters of this life?" (I Corinthians 6:2–3). [North, *First Corinthians*, ch. 6]

Because dominion is ethical/covenantal, corporate inheritance in history will be ethical/covenantal. God issued the dominion covenant to Adam and his heirs (Genesis 1:26–28), but there is now a covenantal separation between disinherited families and adopted families. Adoption (salvation) is by grace alone (Ephesians 2:8–9). *Grace precedes law.* Then comes law. Covenant-keepers are required by God to build God's kingdom in history (Matthew 6:33). This takes capital. God promises to supply this capital. This is seen clearly in God's promise that covenant-keepers will become the primary heirs in history. "But the meek will inherit the land and will delight in great prosperity" (Psalm 37:11). Jesus repeated this promise: the meek will inherit the earth (Matthew 5:5). [North, *Matthew*, ch. 4]

Conclusion

These five covenantal points are inescapable implications of Genesis 1–2. They are primarily judicial points. God established these spheres of responsibility. He holds men accountable for meeting His standards.

The humanistic economist does not begin with Genesis 1–2. Instead, he begins with some aspect of the creation. He does not begin with ownership. That issue raises the question of the *judicial basis* of ownership. This issue leads to the next question: the *moral legitimacy* of ownership. This is the issue of ethics. Humanistic economists almost universally assert that economic science is value-free, or at least it should be. Therefore, any consideration of the issue of original ownership would be regarded by most economists as an illegitimate topic, by definition. Why? Because the question of original ownership would import the issue of morality into economic analysis. *Humanistic economists see morality as an extra-economic issue.* For them, ownership is an externally imposed condition, by definition, as all moral issues are. This approach is basic to most social scientists. They shove questions of morality out of their analyses. But they always import morality back into their policy analyses, one way or another.

The humanistic economist usually begins with a discussion of scarcity and a few of its implications. Assuming the existence of scarcity is not controversial. An economist will not be criticized by his peers for starting his

analysis with scarcity. That is because every economist acknowledges the reality of scarcity, defined as follows: "At zero price, there is greater demand than supply." This is why there are prices. In the case of Adam Smith's pioneering book, *The Wealth of Nations*, he began with a consideration of the division of labor, which is an outworking of men's attempt to overcome scarcity, thereby becoming richer. He assumed scarcity. He did not define it. He also said nothing about original ownership.

I wrote in Chapter 1 of *The Covenantal Structure* that this avoidance of any discussion of original ownership by humanistic economists is part of their implicit presupposition of man's autonomy. *The assumption of man's autonomy is basic to all humanistic thought.* It is the heart, mind, and soul of humanism. It has been all the way back to the pre-Socratic philosophers. Here is what I wrote: "Man is said to be unlike anything that preceded him. Man is purposeful. He plans in terms of his purposes. He shapes the present in terms of a vision of the future. *With man, purpose entered what had been a purposeless environment.* This makes man fundamentally different from the rest of his environment, and possibly unique in the entire universe. Man arose out of purposelessness, but he now imposes change on his environment in terms of his purposes. Purpose is therefore original with mankind. ***Original purpose*** *is seen by humanists as the central factor in defining* ***sovereignty***. In this regard, they agree with Christians. The debate is over who the original sovereign is: God or man" (p. 26).

The next five points are matters of grace: special and common. I discussed the two categories of grace in my book, *Dominion and Common Grace* (1987). Common grace refers to unearned and undeserved blessings from God to humanity in general. Special grace refers to undeserved blessings to covenant-keepers. In both cases, the blessing involves an opportunity to serve God, which is an honor. It is a mark of ethical rebellion to regard this honor as a liability.

D. Judicial (Representative) Laws

Introduction

The five points in Section C refer to God. God is the Creator. He is therefore the Owner, which is a judicial category more than it is an economic category. *The judicial category defines the economic category.* The next five points refer primarily to man as God's judicial agent. This is a matter of trusteeship. Trusteeship has an economic aspect: stewardship. I con-

sider stewardship in Section E.

Trusteeship refers primarily to God's name and His reputation. The third commandment has to do with the protection of God's name. "You must not take the name of the Lord your God in vain, for I will not hold guiltless anyone who takes my name in vain" (Exodus 20:7). [North, *Exodus*, ch. 23] It is part of what I call the priestly laws of the Ten Commandments. The third commandment parallels the eighth commandment, which is the third commandment in the kingly laws. "You must not steal from anyone" (v. 15). [North, *Exodus*, ch. 28] They are linked together. *They both have to do with the protection of private property.* The property being protected by the third commandment is God's name. This refers in the broadest sense to God's reputation. It also has to do with the kingdom of God. *The kingdom of God has more to do with trusteeship in the legal sense than it does with stewardship in an economic sense.* It has more to do with a mission statement than a profit-and-loss statement. Stewardship has to do with increasing the market value of God's property.

I focus here on trusteeship, not stewardship. When I searched for the correct categories of man's trusteeship, I first looked at the categories of God's ownership. Man is made in God's image. Therefore, it seems theologically reasonable to discuss trusteeship in terms of God's original ownership. I looked for parallel judicial principles: original and delegated.

1. God owns everything./Owners are trustees.
2. God delegates ownership./Trustees possess authority.
3. God prohibits theft./Trusts are binding.
4. God evaluates performance./Trustees are accountable.
5. God mandates growth./Trustees designate successors.

1. Owners Are Trustees

This is delegated ownership. This is not original ownership. It is judicially based on God's original ownership. Here is the supreme implication: *this form of ownership is in no way autonomous*. This is why Christian economics rejects any suggestion that there is autonomy in economic relationships. All wealth, including knowledge, is delegated by God to men.

Men hold their wealth as trustees. Trustees are legal agents. They act *in*

God's name. The Christian trustee is supposed to identify himself with God and with the work of God. He must guard against gaining a bad reputation for himself, for he is a legal agent of God. There is a hierarchy involved: point two of the biblical covenant model. *This aspect of trusteeship is a matter of covenantal representation*. This has to do with a statement of faith. It also has to do with a moral code associated with the statement of faith. This judicial standpoint is the legal foundation of the economic aspects of ownership.

This judicial hierarchy is the basis of a crucial implication of Christian economics: *man does not own himself.* This has an important implication for a consideration of humanistic economics: *economic analysis must not begin with the doctrine of self-ownership.* This is a fundamental criticism of some varieties of free market economics.

The biblical doctrine of ownership as trusteeship serves as a refutation of all forms of socialism. There must be multiple trustees in a Christian commonwealth: a division of responsibility. This means that private property is the dominant form of ownership. God has delegated ownership to a multitude of trustees. There is a biblical principle here: *multiple responsible agents*. Solomon announced: "Where there is no wise direction, a nation falls, but victory comes by consulting many advisors" (Proverbs 11:14). [North, *Proverbs*, ch. 31] This is the division of intellectual labor. It undergirds the international division of labor. [North, *Genesis*, ch. 19]

2. Trustees Possess Authority

This authority is legal: the authority to allocate property among competing uses. Humanistic economists refer to this allocation process as *economizing*. This concept is basic to humanistic economics. Owners decide what to do with their property. Christian economic theory declares that owners are God's trustees. Trustees decide what to do with God's property. God holds them accountable for the use of His property, as we see in Jesus' parallel parables of the talents (Matthew 25:14–30) and the minas (Luke 19:11–27).

Ultimately, this authority is the right to buy, sell, or give away property. This is the right to transfer ownership and therefore legal liability to others. This is the judicial basis of exchange. The free market is a gigantic auction process. It rests on this legal right to buy and sell.

This principle serves as a prohibition of what is known as the welfare state. Owners act judicially in the name of God. This is the judicial basis of property rights. These rights are legal immunities against those who would

interfere with the ownership or use of other people's property. This prohibition applies to state officials as well as private thieves. Any attempt by officers of the state to transfer property from one owner to another must be based on biblical law. There is one form of legitimate wealth transfer: restitution to victims from criminals or people who have damaged others (Exodus 22:1, 4). [North, *Exodus*, ch. 43] Any transfer of wealth based solely on economic inequality is prohibited by God's law. "Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously" (Leviticus 19:15). [North, *Leviticus,* ch. 14]

Trusteeship is superior to economic stewardship. It is better to lose money in a good cause than to make money in an evil cause. Of course, it is best to make money in a good cause. It is a good thing to do well by doing good.

3. Trusts Are Binding

A trust is a legal document that places *legal boundaries* around the use of specific pieces of property. *A trust is the judicial model for all forms of private ownership.* It is a legal arrangement by which an owner of property establishes a legal entity that provides benefits for named beneficiaries. The owner transfers the ownership of property to the trust. He appoints (names) a trustee to act on behalf of beneficiaries. This model for this system of property transfer is God's delegation of property to men. They hold this property in the name of God, whether or not they acknowledge this legal arrangement.

The model for trusteeship is Jesus, God's Son. *Jesus is the designated trustee for God the Father.* Paul wrote that Jesus created the universe. "The Son is the image of the invisible God. He is the firstborn of all creation. For by him all things were created, those in the heavens and those on the earth, the visible and the invisible things. Whether thrones or dominions or governments or authorities, all things were created by him and for him" (Colossians 1:15–16). Jesus is therefore the original Owner. He holds this property in trust for God the Father. Paul wrote this about the day of final judgment: "Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For 'he has put everything under his feet.' But when

it says 'he has put everything,' it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (I Corinthians 15:24–28). [North, *First Corinthians*, ch, 17] God the Father empowered Jesus to serve both as Creator and Trustee on His behalf.

Jesus represents God. He said this repeatedly in His earthly ministry. This is what got Him crucified. He was acting in the name of God more than he was acting as the administrator of God's property. But He was both. A trustee is always both.

4. Trustees Are Accountable

There is no ownership apart from legal accountability. There is therefore no such thing as autonomy in the creation.

God holds owners accountable in the broadest sense: morally, legally, confessionally, and economically. They will give an account of their trusteeship at the final judgment. They must act as intermediaries between God and His property. They must evaluate their administration of God's property in terms of God's ethical and legal standards. They must think God's thoughts after him. What God judicially declares—imputes—they must impute. Whatever God imputes economic value to, they must impute economic value to.

This is why every owner had better be eternity-oriented. Jesus' parable of the rich farmer described how not to serve as a trustee. "The field of a rich man yielded abundantly, and he reasoned with himself, saying, 'What will I do, because I do not have a place to store my crops?' He said, 'This is what I will do. I will pull down my barns and build bigger ones, and there I will store all of my grain and other goods. I will say to my soul, "Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry."' But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?' That is what someone is like who stores up treasure for himself and is not rich toward God" (Luke 12:16b–21). [North, *Luke*, ch. 25] The farmer had focused on economic profit. He had missed the point: he was God's trustee.

Trustees are accountable to God. This is why God prohibits theft. God transfers property to someone to serve as His trustee. He wants this person to be economically productive on His behalf. A thief decides that he will

take possession of this person's property. He has other uses for it. The thief then becomes accountable to God in two ways: as a thief and as a trustee of God's property. Even if he is a superior investor, the profits will testify against him on judgment day.

What is true of a thief is also true of a welfare state official who takes title to a piece of property in the name of the state in order to transfer it to others. It does not matter what fine-sounding justifications he and the politicians in whose name he is acting have for the property. These are not God's purposes. Bureaucrats and politicians will give a final accounting to God for their unilateral transfer of property to the state. So will the voters who elected the politicians who passed a law to authorize this transfer of ownership. *The welfare state indicates that God is a thief.* This is a perverse testimony. This is the reason why the so-called social gospel of wealth redistribution by the state is not the gospel of Christ.

5. Trustees Designate Successors

This principle applies to all forms of property and all legal arrangements for the protection and maintenance of property. This goes back to God's arrangement with Adam and Eve regarding the garden. "The Lord God took the man and put him into the garden of Eden to work it and to maintain it" (Genesis 2:15). [North, *Genesis*, ch. 8] His children would inherit his property. *Inheritance is the legal basis of today's property.* Property can be held in trust for designated beneficiaries through the ages. The trustees are required by the trust document to administer the property in the trust in terms of the stipulations of the document.

Trustees can resign, be removed, retire, or die. Beneficiaries can die. The trust perseveres. The desires of the founder of the trust are supposed to be adhered to by the trustees. This structure of succession applies to churches, charitable foundations, and even profit-seeking corporations in rare instances. This is the basis of continuity. This continuity is primarily moral. In some institutions, this can be understood as confessional. An institution's mission statement is an example of such attempted continuity. In contrast, there is no assurance that the economic assets in the trust will maintain their market value over time. The trustee must be willing to preserve the trust's mission statement at the expense of increasing the value of the property inside the trust.

Conclusion

In section D, I have considered the judicial issue of man's subordination to God. This is the issue of man's judicial authority and God's judicial sovereignty. Ownership is primarily a matter of judicial trusteeship. It is only secondarily the issue of man's economic stewardship.

The humanistic economist believes in man's authority. He does not believe in man's subordination to God. This outlook inescapably transfers sovereignty from God to man. Man becomes the primary owner in the economist's thinking. This does not solve the issue of whether autonomous man is primarily individualistic or collective. It therefore does not solve the problem of the free market vs. socialism. The fundamental issue for the humanistic economist is never the issue of original ownership, which is a judicial issue: the legitimate source of delegated ownership. *For humanism, man becomes the operational god*. This is the fulfillment of the serpent's original temptation. The serpent did not tempt Adam and Eve with promises of great wealth. He tempted them with the promise of becoming equal to God in their understanding of good and evil. Yet this promise of equality was a deception. *The serpent was really tempting them to claim superior judgment to God*. No one who claimed anything else would be foolish enough to risk his life by violating God's explicit law. [North, *Genesis*, ch. 11]

The humanistic economist implicitly claims original autonomy for mankind. He therefore implicitly claims original ownership for mankind. This is a judicial claim. It has economic implications, but the primary implications are judicial. That is to say, they are covenantal. They are not simply matters of richer or poorer. They are matters of life and death. They are matters of covenant-keeping and covenant-breaking.

E. Stewardship Laws

Introduction

We come now to economic aspects of delegated ownership. God requires people to act as His stewards. Stewards are responsible for property management. People are supposed to act on God's behalf. They must put His interests above their own.

Stewardship laws lead to institutional arrangements that establish the market value of property. These are laws of ownership, which are therefore also laws of *disownership*: exchange. The judicial laws of trusteeship have

more to do with the allocation of God's property in terms of a confession of faith. They are intended to uphold God's name, meaning His reputation. In contrast, stewardship laws have more to do with biological multiplication and economic growth than they do with the maintenance of God's reputation or the mission statement of an organization. Therefore, from a Christian point of view, *stewardship is subordinate to trusteeship*. This is obviously not the case with humanistic economics.

A good way to understand the difference between trusteeship laws and stewardship laws is to focus on the difference between the third commandment, which defends God's name, and the eighth commandment, which defends private property. The Ten Commandments are divided between the priestly laws (1–5) and the kingly laws (6–10). First, there is the law against the misuse of God's name (commandment three). Second, there is the law prohibiting theft (commandment eight). The third commandment is point three in the priestly laws. The eighth commandment is point three in the kingly laws. The third commandment is not about stealing an economic asset. It is about maintaining the property of God, His name. This is not marketable property. It cannot be bought and sold in a market. *Guarding the exclusive use of His name from invaders is more important to God than protecting specific pieces of private property from thieves*. Modern man does not see it this way, i.e., hear it this way. This is a mark of modern man's rebellion against God.

1. Purpose Precedes Planning

The model here is God's purpose in the original creation. He had a purpose. I have mentioned it before, but it is a good idea at this point to cite it again. This is from the English Standard Version (ESV): "Blessed be the God and Father of our Lord Jesus Christ, who has blessed us in Christ with every spiritual blessing in the heavenly places, even as he chose us in him before the foundation of the world, that we should be holy and blameless before him. In love he predestined us for adoption to himself as sons through Jesus Christ, according to the purpose of his will, to the praise of his glorious grace, with which he has blessed us in the Beloved" (Ephesians 1:3–6). The key phrase is this: *before the foundation of the world*. He then implemented His six-day plan.

The theocentric principle that purpose precedes planning also applies to human action. Human action is purposeful. This was the insight of econ-

omist Ludwig von Mises in his book, *Human Action* (1949). I argue that the authority for this insight is the Bible's story of the creation week. Mises developed his logically deductivist system of economic theory on the basis of this axiom of action. In contrast, I do not call the Genesis creation story an axiom of action. I call it the theocentric model for human action. Austrian School economics is closer to Christian economics than any other humanistic school of economic thought. This rests in large part on the fact that Mises began his economic analysis with the principle of each individual's purposeful action.

Man is made in the image of God. Thus, when a man thinks purposefully, he represents God. He is thinking in terms of the first point of the covenant, which is the sovereignty of God. The sovereignty of God is demonstrated in God's creation of the universe out of nothing. This is why purposeful human action reflects God's creativity. This is how we know that God is creative. He has purposes before He has plans of action.

God judges people, not simply in terms of the outcome of their actions, but also in terms of their motivations. We cannot read each other's minds, but we can draw inferences from what other people have said they wanted to accomplish. We can compare what they said with what they actually achieved. We impute economic value to the outcome of their actions, but we also impute motivation to their actions. *Their motivations reflect their trusteeship more accurately than their plans of action.* A common saying is this: "The end justifies the means." This principle of action is not biblical. The ends are supposed to govern the means. Our plans are supposed to reflect our purposes, not just in terms of their economic outcomes, but also and even more so in terms of our purposes. *Purposes are more fundamental than plans.* Our plans are supposed to be morally and confessionally consistent with our purposes.

2. Priorities Structure Planning

There is a hierarchy of priorities in human action. We have limited resources. We have purposes. We design our plans to fulfill our purposes. But we should face the fact that we have limited resources. *We cannot achieve everything we would like to achieve with the resources at our disposal.* This is an aspect of scarcity. This limitation was also true in the garden of Eden before the fall. Scarcity is not a curse on man; rather, it is a condition of his finitude. In Genesis 3, God cursed the pre-fall system of scarcity (Genesis

3:17–19). [North, *Genesis*, ch. 12] Had there been no scarcity in the garden, there would have been no valuable capital assets to defend and improve. But there were.

Because we have limited resources, we have to allocate these resources in such a way that we hope will achieve our highest priorities. *We will run out of resources before we run out of priorities.* This is why we economize. This is the essence of resource allocation. Some economists define economics as the science of human choices in the world of scarce resources. A famous book that takes this approach was written in 1932 by a disciple of Mises, Lionel Robbins: *An Essay on the Nature and Significance of Economic Science*. He wrote: "For rationality in choice is nothing more and nothing less than choice with complete awareness of the alternatives rejected. And it is just here that Economics acquires its practical significance. It can make clear to us the implications of the different ends we may choose. It makes it possible for us to will with knowledge of what it is we are willing. It makes it possible for us to select a system of ends which are mutually consistent with each other" (p. 136).

Our priorities are numerical: first, second, third, and so forth. We cannot place numerical value on the degree of satisfaction that we want to achieve from our allocation of resources. This is the difference between ordinal priorities and cardinal priorities. We cannot estimate cardinal priorities. *There is no objective value scale for subjective value.* So, we cannot impute objective value to our priorities. We can compare our priorities only subjectively. We want A more than we want B at some objective price. We cannot say exactly *how much more* we want A rather than B at this price. Then we choose some goals and eliminate others in an orderly way: the order in which we would like to achieve them with the limited resources that we possess or hope to possess within the time frame of our plan.

3. Ownership Involves Exclusion

The model for this stewardship law is marriage. Here is biblical evidence for this statement. In the list of five kingly commands in the Ten Commandments, the commandment against adultery precedes the commandment against theft. God owns the family, and He has established the judicial obligation of exclusion for husbands and wives. A husband excludes all other men from bonding with his wife, and his wife does the same with him. Each partner has a legal claim on the other's faithfulness. Once people

understand this principle, they are ready to understand the prohibition against theft. All over the world and in every society, husbands and wives understand this principle of exclusion.

God excluded Adam and Eve from access to the forbidden tree. He established a property right. There was a legal boundary around that tree. *Property rights are always about boundaries: legal, institutional, and geographical.* All legal rights are about boundaries. Owners have the right of exclusion. They have the right to use their property as they see fit, as long as it does not interfere with someone else's use of his property.

This means that inclusion and exclusion go together. They are two sides of the same coin. This is also true of inheritance and disinheritance. Inheritance and disinheritance are concepts that are extensions of the commandment against theft.

4. Owners Evaluate Performance

This is an extension of the fourth law of the theocentric judicial covenant: God evaluates performance. Delegated owners also evaluate performance. They are supposed to evaluate performance in terms of the criteria established by God. They impute economic value because they are made in the image of God. They are able to do this because God does this. They are stewards of God's property, so they have to be able to evaluate performance. *They do as creatures what God does as Creator.* They are supposed to think God's thoughts after Him. They can do this self-consciously as stewards of the Creator God, or else they can do it as implicit stewards of some other god. This other god may be the state. It may be the free market. Ultimately, a self-proclaimed autonomous man serves himself as god.

This is the economic doctrine known as imputation. It is fundamental to Austrian School economics. The founder of Austrian School economics was Carl Menger. In his book, *Principles of Economics*, published in 1871, he shifted the origin of economic value from objective economic value, which had been dominant among classical economists from Adam Smith to Karl Marx. He substituted the concept of subjective value. This rested on a concept of subjective evaluation. This was a crucial development in the history of economic thought. *Menger shifted economic theory from realism to nominalism.* This is rarely if ever discussed in histories of economic thought, but this was the philosophical heart of his remarkable philosophical breakthrough. Philosophical realism and philosophical nominalism had been de-

bating points in Western philosophy ever since the fourteenth century. Economists prior to Menger had explained economic value in terms of objective inputs, either the labor theory of value or the cost-of-production theory of value. The two explanations were opposed to each other, but they were unified in their commitment to philosophical realism.

My version of Christian economics is not based on either realism or nominalism. It is based on covenantalism. Both realism and nominalism have fundamental contradictions that they cannot answer. This is not the place to discuss these contradictions in detail, but they do exist, and they are perennial. Here is a brief summary.

I begin with **realism**. Here are two anomalies. First, if we argue that economic value comes from labor, then why is a waterfall that can generate electricity valuable? No human being made the waterfall. Second, somebody may invest a lot of money in resources in order to produce a product that turns out to have little or no economic value when it is brought to market. Its price is too low to cover the costs of production. How is this possible if economic value is derived from objective costs of production?

Next, there is **nominalism**. This traces economic value back to individual imputation. This imputation is subjective. Subjective value theory has a major problem. According to subjective value theory, it is impossible to make interpersonal comparisons of subjective utility. Lots of people subjectively impute different values to a particular item. When the time comes to decide a corporate economic policy, policy-makers must be able to discover what the correct economic value is. Problem: *there is no way to know.* An item's price will be determined by competitive objective money bids in the free market, but the person making the highest bid and who takes it home may not impute much value to the item. He may be extremely rich, and buying it does not involve any kind of serious sacrifice or desire on his part. Someone else who really wanted it will not be able to buy it. He could not offer a higher bid. Critics of the free market have complained against this outcome for two centuries. There is no way for a free market economist to argue logically on the basis of subjective value theory that any society is benefited by a system of competitive bidding that allows individual high bidders to win.

5. Owners Designate Heirs

Men die. This negative sanction imposes responsibilities on owners to

designate heirs, either individual or institutional. This raises the problem of unwise heirs. Solomon wrote: "I hated all my accomplishments for which I had worked under the sun because I must leave them behind to the man who comes after me. For who knows whether he will be a wise man or a fool? Yet he will be master over everything under the sun that my work and wisdom have built. This also is vapor. Therefore my heart began to despair over all the work under the sun that I did. For there might be someone who works with wisdom, with knowledge, and skill, but he will leave everything he has to a man who has not made any of it. This also is vapor and a great tragedy" (Ecclesiastes 2:18–21). [North, *Ecclesiastes*, ch. 4] There is no simple solution to this problem. Solomon was known as a wise man (I Kings 10). He left his kingdom to an unwise son. His son imposed rigorous taxes. Ten of the tribes of Israel revolted against him (I Kings 12). [North, *Historical Books*, ch. 20] The kingdom was never reunified under the rule of an Israelite king.

In order to fulfill God's requirement of compound economic growth, there must be inter-generational wisdom passed on by owners to their as yet non-owning sons and daughters. This wisdom must include the knowledge of how to increase per capita wealth. The solution to this problem eluded mankind until about 1800. Only then did per capita wealth increase every year by 2% or more. That compounding process has created the modern world. Economic historians have asked this question: "Why did this begin sometime around 1800 in only two regions, the British Isles and English-speaking North America?" So far, they have not come to any agreed-upon solution to this question. Human history changed sometime around 1800, and we do not know why. Why did this development not begin in the tiny nation of Israel no later than 1400 B.C? What factors prevented this?

Property owners should teach their children whatever they know about the relationship between biblical ethics and personal responsibility in numerous areas of life. If they do not, their children are unlikely to be economically successful. Then a major problem appears: *the dissipation of family inheritance*. The larger the number of children, the more rapidly the per capita inheritance disappears. Very few families in history, other than royal families in prosperous nations, have been able to sustain a program of increasing per capita wealth beyond three or four generations. The most famous of these families is the Rothschild banking family. They have done this for two centuries. But there are few others. The DuPont family in the

United States has been successful. The Rockefellers have been successful. Probably least known is the Sassoon family, a family of Middle Eastern Jewish merchants. They do not reveal to the public what family members are worth, but they have been rich for over two centuries. These families are hardly representative of families in history.

Throughout history, societies have faced this problem: *regression to the mean*. Spectacular performance economically by a company rarely is maintained for more than half a century. Here, we are not speaking of families. We are speaking about corporations. They are far more competitive economically than families in their ability to hire specialized talent in order to maintain long-term economic growth. Owners designate heirs, but in our day, the functional owners are senior executives. One way to transfer wealth within a company is by granting stock options to young men who are expected to be highly productive employees in the future. The future value of these options is dependent upon the performance of the company over time. Share value must rise for the options to become valuable. Shares must reach a "strike price." The ability of senior managers to hire such people and to reward them in such a way that their efforts will benefit both the employees and the company over decades is a rare skill. Apparently, it cannot be taught. It has not been taught in graduate schools of business.

Conclusion

Stewardship laws govern all men, but only covenant-keepers acknowledge that God has established these laws. They recognize that they are the economic agents of God because they are the judicial agents of God. Not many Christians understand this. Until most Christians recognize this and then structure their lives in terms of it, they will live on the scraps that fall from the tables of the humanists. In my era, this is a lot of scraps. Furthermore, there is not much responsibility in feeding off of these scraps. *To the degree that Christians seek to avoid increased responsibility in history, they must content themselves with scraps*. The kingdom of God will exist in the shadows of society. It will be seen as a refuge for people who want to avoid the risks of life, who do not want to increase their responsibility for exercising leadership.

It is not easy to sell responsibility. But this is what discipling the nations requires (Matthew 28:18–20). [North, *Matthew*, ch. 48]

F. Economic Laws

Introduction

These are fundamental laws that govern the economy as a whole. They are not laws of trusteeship, meaning judicial laws that govern the affairs of individuals and institutions in their capacity as representatives of God. They are not stewardship laws, meaning ownership laws that govern the affairs of individuals and institutions in their capacity as representatives of God. Rather, they are *laws governing the market process*. They are outworkings of the three previous sets of five laws each. These five laws prevail across time and across borders. They are the kinds of laws that are discussed by humanistic economists in textbooks, monographs, and scholarly journal articles. In this sense, they are laws governing conventional economic theory. They have been investigated by economists for many decades.

Economists believe that their theories apply accurately to economic practices and also economic results. *They believe that the economy is governed by laws that can be discovered by economists*. They do not argue that these laws are equivalent to laws of physics. This is because men make decisions, unlike inanimate objects. These decisions are not always predictable. Nevertheless, most economists eventually use the phrase "laws of economics." If there were no such laws, then whirl would be king in economic affairs. In such a world, economists would not be able to make predictions any more accurate than by flipping a coin. (Some critics of economists say that economists are even less capable than people who make predictions by flipping a coin.)

The heart of economic analysis is this phrase: "If . . . then." If economists were not able to argue plausibly that there is a predictable connection between a carefully defined *if* and a carefully defined *then*, economics would not be a social science. It would have no legitimacy. It would have little or no influence. Because economics is regarded as a science, it does have legitimacy, and economists have more influence than members of any other social science, I conclude that there are causal connections linking prices and outcomes, and causal connections can be discovered, described, and occasionally taken advantage of by entrepreneurially minded economists.

1. Owners Adopt Purposes

This is a universal law. This is because people are made in God's image.

He adopts purposes, so people do, too. Purpose should be the starting point of all Christian social theory, including economic theory.

Purposeful action as a starting point is most consistently developed by members of the Austrian School of economics. Purposeful action was the central premise of Mises. All other schools of free market economic opinion accept some variation of this statement: "People act." Free market economists believe that people make choices between alternative courses of action. They do not believe that these people act irrationally most of the time. Above all, economists believe that *people respond in a predictable way to incentives*. If people did not respond predictably to incentives, then economists could not make plausible predictions about what people will do if given opportunities to improve their situations. This outlook is encapsulated in this phrase: "When prices fall, the quantity demanded increases." A wise economist adds this qualifying phrase: "Other things being constant." If people did not increase their purchases of goods that now sell for less than before, then economists could not say anything coherent about the market process.

Economic science deals with connections between ends and means. Economists speak of ends as being subjectively determined. Then they discuss a man's choice of specific objective means from among a variety of scarce means. By "scarce," economists mean this: "At zero price, there is more demand than supply." An economist begins his analysis with a consideration of people's *subjective purposes* (ends) in order to discuss the ways in which they choose *objective means* to achieve their ends.

A Christian economist should also begin his analysis with this philosophical presupposition: *the universe was created by God alone, and it is presently sustained by His providential power.* A Christian economist believes that there is a subjective coherence in the minds of men that corresponds to the objective coherence of the objective, external world. On what basis does he believe this? Because he believes in the providence of God. He does not assume that man's mind is autonomous. He also does not assume that the market process is autonomous. He believes that nothing except God is autonomous. He believes in a purposeful God, a purposeful creation, a purposeful providence, and purposeful human beings who are made in the image of God. In short, he assumes cosmic personalism. I selected this title for Chapter 1 of my economic commentary on Genesis: "Cosmic Personalism." This is not the starting point of humanistic economic theory.

2. Prices Provide Information

Prices are crucial for setting priorities. Without prices, we fly blind. We do not know what things cost. We do not know what people have recently bid in order to buy or rent scarce resources. In a world governed by scarcity, prices are tools of understanding and therefore tools of action. *Prices are the most important sources of information that lead to the coordination of competing economic plans of action.*

Prices are objective. They are the product of competitive bidding in the market. They are the results of the people with specific information who are willing to put money on the line by buying or selling assets. The information conveyed by prices is highly specific. We can legitimately say this: *prices are necessary but not sufficient in conveying accurate information to decision-makers*. Without money prices, the only economy that could exist would be a barter economy, which is primitive. Most of the world's population would die within a month or two. Mises argued in his famous 1920 essay, "Economic Calculation in the Socialist Commonwealth," that without prices generated by competitive free market bids, central planners would be unable to allocate goods and services according to what people want. Central planners would be blind. This is especially true of the prices for capital goods. *Without prices, the economy would become irrational.*

F. A. Hayek in 1945 extended this argument in his essay, "The Use of Knowledge in Society." He argued that prices are society's indispensable means for the free market to coordinate the economy. They are necessary for sharing valuable information. People in local markets bring their best guesses regarding the value of specific goods and services. In this way, the best economic information is harnessed to serve society. I would add this: prices are offered free of charge to nonparticipants in specific market transactions. This is a tremendous benefit for society. In this sense, all of society becomes a kind of free rider on the best information that individuals possess about market conditions.

3. People Prefer More

Of course, a wise economist adds this qualification: "at the same price." This is one of the fundamental laws of economics. It is a law of human nature. Why do I say this? Because the dominion covenant is basic to human nature. People are to multiply. This means population growth. Also, in order to avoid declining wealth per capita as a result of a growing population,

people must increase their output. There must be economic growth. So, God has built into most people the desire to own more.

There are two motivations here. One is the worship of mammon: "more for me in history." The other is capital appreciation for service to God. Jesus said: "No one can serve two masters, for either he will hate the one and love the other, or else he will be devoted to one and despise the other. You cannot serve God and wealth [mammon]" (Matthew 6:24). [North, *Matthew*, ch. 14] So, men's motivations for greater wealth are different. But the desire to own more is widespread: a nearly universal trait.

If this law were not true, economic science would not be possible. If people were not willing to give up some of what they presently own in order to secure better conditions for themselves in the future, as they see fit, it would not be possible to explain the market process. It is unlikely that there would be much of a market process. In a family, people are willing to sacrifice for others. In small local churches, this is occasionally an important aspect of church life. But in society at large, where people do not know each other, and people are not bound by love or a sense of obligation, if people did not want more, they would not cooperate with each other. The division of labor would collapse. Starvation would be a constant threat. It is no longer a threat to most people.

So, *the desire for more sustains society*. Nevertheless, Christ warned against the god of mammon. He indicated that the God of mammon is the greatest rival to the God of the Bible. Yet the most important economic motivation appears to be the worship of mammon. Why would God place this at the center of the dominion mandate?

The correct answer has to do with the difference between common grace and special grace. Common grace is what God gives to all men. It is a blessing undeserved by anything they have done or will ever do. It is an undeserved blessing. They worship the god of mammon. They worship themselves. But, in worshiping themselves, they strive to increase their wealth. They must increase their output. They must increase their efficiency. They must become more productive. *They must serve paying customers*. This division of labor increases the wealth of almost everybody in society. The desire for more encourages peaceful cooperation. Is this grace? Yes.

Common grace is not the same as special grace. Special grace has to do with soul-saving and God's kingdom-building. This is the grace extended by God to covenant-keepers. In their lives, the worship of mammon is a liability.

It is a threat to their wealth—wealth in the broadest sense. Jesus announced this command in the same passage that He warned against the worship of mammon. "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). [North, *Matthew*, ch. 15] Yet, already in this exposition of God's kingdom, Jesus had already encouraged covenant-keepers to accumulate more. "Do not store up for yourselves treasures on the earth, where moth and rust destroy, and where thieves break in and steal. Instead, store up for yourselves treasures in heaven, where neither moth nor rust destroys, and where thieves do not break in and steal. For where your treasure is, there will your heart be also" (Matthew 6:19–21). [North, *Matthew*, ch. 13] The question is this: "In which location will covenant-keepers accumulate more?" Mammon's kingdom-building mandates the accumulation of wealth solely in history. God's kingdom-building mandates the accumulation of wealth in both history and eternity.

4. Scarcity Imposes Costs

Here is the economist's definition of scarcity: "At zero price, there is greater demand than supply." It is a universal definition. I know of no school of economics that opposes this definition. I know of no superior definition.

In the biblical covenant model, point two is closely related to point four. Hierarchy is closely related to sanctions: performance. Planning for the future is closely related to profit and loss. The quest to gain profit and avoid loss is a great motivation for planning carefully. The goal is profit; the means are scarce. By scarce, I mean they command a price. For people who are purchasing capital assets or raw materials, prices are costs.

Jesus warned us to count the costs (Luke 14:28–30). [North, *Luke*, ch. 35] He discussed personal sacrifice for the sake of the kingdom in terms of prices. "The kingdom of heaven is like a treasure hidden in a field. A man found it and hid it. In his joy he goes, sells everything he possesses, and buys that field. Again, the kingdom of heaven is like a man who is a merchant looking for valuable pearls. When he found one pearl of very great value, he went and sold everything that he possessed and bought it" (Matthew 13:44–46). [North, *Matthew*, ch. 31] We are to assess our priorities in terms of the cost of attaining them. This is what it means to discuss the relationship between ends and means. It is the discussion of prices. It is therefore a discussion of price formation. Point two in the list of economic laws is this: "Prices provide information." *Prices are the way that we esti-*

mate costs. They are the way that we estimate how many of our priorities we can attain in a particular period of time. Prices remind us of the burden of scarcity. They remind us that we are finite. We cannot attain all that we would like to attain at zero price, including the price of time. For finite creatures, time is not a free resource. This is especially true of dying finite creatures. There was finitude before the fall, but after the fall, there is also death. You and I are running out of time. We need to place a price on the time remaining to us. Second, we had better acknowledge that accurate, relevant information is not a free resource. Once we understand this, it shapes our decisions and our institutions. The best book that I have ever read on this was written by Thomas Sowell: *Knowledge and Decisions* (1980).

5. Growth Reduces Scarcity

We learn from the third law of economics that people want more [at the same price]. We learn from the fourth law of economics that scarcity imposes costs. Because we want more, we would like to reduce our costs. We have a solution with the fifth point: *economic growth reduces scarcity*. This law is an implication of this biblical law: "But you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:17–19). [North, *Deuteronomy*, ch. 22] Moses said that increasing per capita wealth is God's blessing for obedience to His laws.

God wants His people to steadily and systematically overcome cursed scarcity (Genesis 3:17–19). Why? Because He wants them to extend His kingdom in history. This process takes capital. The means of production are not free of charge. But if we can find ways of lowering the costs of production, we thereby gain the ability of extending his kingdom more efficiently. We can achieve this at a lower price. *To imagine that God does not favor economic growth is to imagine that the dominion covenant has not been extended into the world beyond the fall of man*. But it has been extended. Jesus spoke about it repeatedly. He even said that we should sacrifice all that we own to buy the pearl of great price. Of course, because entrance into God's kingdom is only by God's grace, the kingdom is not for sale. So, what did Jesus mean? He meant that God's kingdom is not going to be delivered to

His people on a silver platter. We should not expect to make bread out of stones. "Then Jesus was led up by the Spirit into the wilderness to be tempted by the devil. When he had fasted forty days and forty nights, he was hungry. The tempter came and said to him, 'If you are the Son of God, command these stones to become bread.' But Jesus answered and said to him, 'It is written, "Man shall not live on bread alone, but by every word that comes out of the mouth of God"' (Matthew 4:1–4).[North, *Matthew*, ch. 1]

Consider this petition in the Lord's prayer: "Give us today our daily bread" (Matthew 6:11). [North, *Matthew*, ch. 12:B] If economic growth were not a blessing, God would not ask us to pray this prayer. Hunger is a curse. Therefore, we are to pray for its reduction. Increased economic growth is therefore a legitimate goal for every Christian. It takes capital to build the kingdom of God. There are no free lunches made out of stones. The only free lunch in life is God's grace. But this lunch was not free. The crucifixion was not free.

Conclusion

I have categorized these five principles as economic laws. A critic might say that these are not laws in the way that the statement that "sooner is better than later [at the same price]" is. This is correct. They are laws analogous to the ways that the 15 laws are. They are fundamental rules that enable us to understand the world around us. Economic laws are not autonomous. They are implications of the previous 15 laws. They are true only because the previous 15 laws are true. They are therefore derivative.

Humanistic economists do not regard economic laws as derived from legal principles. They see economic regularities as aspects of the human condition, which is cosmically autonomous. They implicitly assume this: "Man is autonomous. Therefore, economic laws are autonomous." Some economists begin with the logic of the mind to derive economic laws. Mises is the premier example. Other economists look to detailed historical studies of the market process to identify regularities that have the status of laws. The German historical school of the nineteenth century is an example. Most economists choose something in between. They do so in a non-self-conscious way. This is basically the ancient philosophical debate between Parmenides, the defender of an unchanging logical system, and Heraclitus, who believed that history changes everything, including human laws and logic.

Conclusion

This chapter is a development of my Preface to *The Covenantal Structure of Christian Economics*. There, I presented my suggested four areas of covenantal thought in economics: judicial (theocratic), judicial (representative), stewardship laws, and economic laws. I begin with fundamental law, meaning biblical law, not economic analysis. I also begin with God, not man. My thinking is self-consciously theocentric. You can see this in the final typeset editions of my economic commentaries on the Bible (2012). I begin Chapter 1 of Volume 1, *Sovereignty and Dominion*, with these words: "The theocentric principle here is God as the Creator. From the point of view of economics, this is God as the cosmic Owner. It corresponds to point one of the biblical covenant." I continued this practice of identifying the theocentric principle at the beginning of every exegetical chapter in all 31 volumes. I recommend this practice. The Trinity is the center of the universe, metaphysically speaking. It should be at the beginning of covenant-keepers' thinking in every area of life.

Christian social theory should always begin this way. It should begin with the Trinity, and it should begin with the judicial structure of the covenant. Man is under God's law, now and forever. God uses this law-order to judge the performance of individuals and collectives. We must search the Bible for guidelines in judging every field of thought, including academic thought. To do this, an investigator of a particular field would be wise to examine the covenant structure of the field. He should ask himself this: "In what ways do the covenant's five categories apply to the field I am investigating?" If the investigator can identify these applications, he has begun to "crack the code" of that field. Without gaining insight into the applications of all five categories, he will miss important aspects of the field. The covenant's five points are the starting point for any investigation. The other issues of the field are subordinate to these five.

You can use the four volumes of *Christian Economics* to begin to gain insights as to how this can be done in a specific field. You may find that there are other applications of one or more of the five points that would provide greater insight into economics, both in theory and practice. But I warn you of an ancient rule: "You cannot change just one thing." If you substitute a different application of a category, this will have ramifications for your understanding of Christian economics as an integrated whole. Be alert

to these subordinate ramifications. You will have to re-think more than one modification you make to the system I have developed here. "My son, be aware of something more: the making of many books, which has no end and much study brings weariness to the body" (Ecclesiastes 12:12). It takes its toll on the mind, too. But, as they say, use it or lose it.

3

VALUE-LADEN ECONOMIC THEORY

Then Jesus told them a parable, saying, "The field of a rich man yielded abundantly, and he reasoned with himself, saying, 'What will I do, because I do not have a place to store my crops?' He said, 'This is what I will do. I will pull down my barns and build bigger ones, and there I will store all of my grain and other goods. I will say to my soul, "Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry."' But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?' That is what someone is like who stores up treasure for himself and is not rich toward God" (Luke 12: 16–21).

Analysis

I have analyzed this parable in detail in my economic commentary on Luke. My analysis appears in Chapter 25.

From the point of view of humanistic economic analysis, the rich man was doing an exceptionally good job. He had crops to store. He had so many crops that he needed more barns. He was serving the public. He was doing his share in answering one section of the Lord's prayer: "Give us today our daily bread" (Matthew 6:11). [North, *Matthew*, ch. 12:B] The humanistic economist would not praise such an individual, for the humanistic economist believes that praise or condemnation is never justified in the name of scientific economics. To praise or condemn would involve an ethical standard, and the humanistic economist insists that all economic theory is value-free. Nevertheless, in the back of his mind, a free market humanistic economist would say that this man was a benefit to the community. His agricultural operation was showing a profit. It was growing. He should have continued doing more of the same. That is what economic profitability means for every individual. Profitability means that consumers are asking a particular seller to continue to do whatever it was that he has been doing.

Jesus said otherwise.

Jesus did not suggest that he was doing anything illegal. Jesus did not suggest that he was in some way exploiting poor people. He had nothing critical to say about the man's business efficiency. But he made it clear that this man was going to hell, as described in Luke 16. This implied that the man's soul would eventually be reconnected with his resurrected body, whereupon he would be dumped into the lake of fire for all eternity (Revelation 20:14–15). In short, this man was a cosmic loser.

The Christian economist has a theological obligation to make it clear that success in selling is not the same as success in living. The Christian economist has a moral and theological obligation to do this specifically as an economist, not simply as an observer. There must be no separation between the Christian economist's work as an economist and his work as an evangelist, theologian, and economic advisor. *Economic theory is far from being value-free.* Nothing is value-free. Economic theory is far from being autonomous from God. Nothing is autonomous from God. Christian economics is governed by the Bible, just as Christian everything else is supposed to be governed by the Bible.

Jesus' parable of the barn builder should be representative of everything that is presented as Christian economic analysis. *Ethics is fundamental to Christian economic analysis.* The revelation of the Bible is fundamental. Jesus gave a parable warning us against making an eternal error that will lead to eternal negative sanctions. We should take this warning seriously. It does not matter if we want to get a job in a tax-funded state university that does not allow this kind of discussion. If we are going to teach economics in the name of Christ, then we have to consider the question of ethics.

It is certainly possible for a humanistic economist to discuss what the barn builder was doing in terms of meeting a market. Consumers wanted to buy his crops. He had to store the crops somewhere. It is certainly legitimate to discuss the questions of thrift, capital formation, hiring laborers to build barns, and other aspects of this enterprise. I have no doubt that a competent humanistic economist could provide an accurate assessment of his motivation, his priorities, his economic plan, and the most likely outcome of that plan in history. What the humanistic economist does not want to discuss is the outcome of his plan that evening. Neither did the barn builder. The outcome of that plan was eternal torment. The barn builder made a catastrophic mistake. He was a good entrepreneur with respect to

history, and he was a fool with respect to eternity.

Christian economics has to deal with the issues related to his foolishness. The words of Jesus that follow the parable are authoritative.

> Jesus said to his disciples, "Therefore I say to you, do not worry about your life, what you will eat—or about your body, what you will wear. For life is more than food, and the body is more than clothes. Consider the ravens, that they do not sow or reap. They have no storeroom or barn, but God feeds them. How much more valuable you are than the birds! Which of you by being anxious can add a cubit to his lifespan? If then you are not able to do such a very little thing, why do you worry about the rest? Consider the lilies—how they grow. They do not labor, neither do they spin. Yet I say to you, even Solomon in all his glory was not clothed like one of these. If God so clothes the grass in the field, which exists today, and tomorrow is thrown into the oven, how much more will he clothe you, O you of little faith! Do not look for what you will eat and what you will drink, and do not be anxious. For all the nations of the world look for these things, and your Father knows that you need them. But seek his kingdom, and these things will be added to you. Do not fear, little flock, because your Father is very pleased to give you the kingdom. Sell your possessions and give to the poor. Make for yourselves purses which will not wear out—treasure in the heavens that does not run out, where no thief comes near, and no moth destroys. For where your treasure is, there your heart will be also" (Luke 12:22–34).

I devoted Chapter 26 to this passage in my commentary on Luke. If we take this literally, it would indicate that all Christians should live in poverty. But if they did, then how could they build the kingdom of God? How could church buildings be built? How could evangelism programs be funded? How could Christians become dominant economically in society, providing employment to the vast masses of humanity? What Jesus was saying was this: *our attitude regarding our wealth should be "here today, gone tomorrow."* Maybe our wealth will be gone tomorrow, or maybe we will be. For those Christians who worry about their economic status, this is a warning. They should re-think what it means to live as a Christian in history. Christians

should not be so tied to their economic status that they lose track of their economic callings before God: the most important thing they can do in which they would be most difficult to replace. They should not wish for poverty for its own sake, nor should they wish for wealth for its own sake. They should not seek anything for its own sake, other than building the kingdom of God. *To seek anything for its own sake is to seek autonomy from God*.

A. Value-Free Economic Theory

From the days of classical Greek philosophers until the present, there have been promoters of the idea of the separation of ethics from philosophy and science. The promoters of this viewpoint want to escape the burden of conforming to any ethical system, especially the ethical system that is the source of their funding. Philosophers and scientists want the funding, but they do not wish to conform to the ethical standards of the people who are providing the funding. *They want autonomy, but they also want the funding.* This has been basic to covenant-breaking man's thinking from Adam until the present. Men proclaim their autonomy, but they also demand authority: subservience of others. Men claim autonomy from God, but they demand power as if they were God. This is the Adamic outlook.

Beginning with the creation of tax-funded universities in the late eighteenth century in what is now Germany, salaried philosophers, scientists, and especially social scientists have insisted on the doctrine of neutrality. They have insisted they are ethically neutral in their work as academics. They have insisted that they conduct their investigations neutrally. *This is the dominant myth of academia today*. Academics have used this myth to justify their funding by money collected from taxpayers who do not share their anti-God, anti-ethical presuppositions. They want the funding, but they do not want to be forced to conform to the prevailing ethical standards of the day. So, they have invoked the myth of neutrality.

In the case of economics, a few economists have been quite forthright about this separation between their supposedly detached investigations and any system of ethics. Ludwig von Mises was probably the most forthright of all economists in his insistence on a such a separation. I am unaware of any statement by any economist that matches this one with respect to the separation between God and economic logic. This is paragraph two of the Introduction to his main book, *Human Action* (1949).

> Philosophers had long since been eager to ascertain the ends which God or Nature was trying to realize in the course of human history. They searched for the law of mankind's destiny and evolution. But even those thinkers whose inquiry was free from any theological tendency failed utterly in these endeavors because they were committed to a faulty method. They dealt with humanity as a whole or with other holistic concepts like nation, race, or church. They set up quite arbitrarily the ends to which the behavior of such wholes is bound to lead. But they could not satisfactorily answer the question regarding what factors compelled the various acting individuals to behave in such a way that the goal aimed at by the whole's inexorable evolution was attained. They had recourse to desperate shifts: miraculous interference of the Deity either by revelation or by the delegation of God-sent prophets and consecrated leaders, preestablished harmony, predestination, or the operation of a mystic and fabulous "world soul" or "national soul." Others spoke of a "cunning of nature" which implanted in man impulses driving him unwittingly along precisely the path Nature wanted him to take.

In Chapter I, "Acting Man," Part 6, "The Alter Ego," he wrote this: "Praxeology [the science of human action] and history are manifestations of the human mind and as such are conditioned by the intellectual abilities of mortal men. Praxeology and history do not pretend to know anything about the intentions of an absolute and objective mind, about an objective meaning inherent in the course of events and of historical evolution, and about the plans which God or Nature or Weltgeist or Manifest Destiny is trying to realize in directing the universe and human affairs." On the final page of his book, he wrote this: "In this sense we may say that economics is apolitical or nonpolitical, although it is the foundation of politics and of every kind of political action. We may furthermore say that it is perfectly neutral with regard to all judgments of value, as it refers always to means and never to the choice of ultimate ends." He ended where he began: an assertion of the autonomy of economic theory from the idea of God and from all value judgments. Economic theory is value-free.

He was not alone. George Stigler was one of the most prominent economists in what is known as the Chicago School of economics. He won what

is called the Nobel Prize in 1982. (Its real name is this: The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.) In his second book, *The Theory of Competitive Price* (1942), he discussed the issue of ethics. "Ethics is the study of values; so in the means-and-ends terminology ethics considers the relative desirability field of the various ends. The philosopher, and not the economist, attempts to decide whether a consumer should prefer recitals of the modern dance to spiked beer. Strictly speaking, words like *should* and *bad* cannot occur in an economic discussion—at most one may say that an action is not appropriate to the end in view" (p. 15). This is the operating presupposition of all modern humanistic economics. It is so widely assumed that economists do not begin their textbooks with any such declaration.

There is an operational problem with this outlook. I began writing about this in Chapter 4 of the first volume in my series on the economic commentary on the Bible: *The Dominion Covenant: Genesis* (1982). It now appears as Chapter 5 in the updated version of that volume: *Sovereignty and Dominion: An Economic Commentary on Genesis* (2012). Economists are constantly asked to give advice to governments. They are the only social scientists who are taken seriously enough by government agencies and politicians to be asked to provide this advice. But if economics is value-free, then on what basis can economists offer such advice? They cannot offer this advice as scientists, certainly. That is because they claim autonomy from politics and ethics for their work as scientists. But if their work as scientists has any meaning at all for practical applications, then the results of their investigations must be related to politics. This means that it has to be related to ethics, for politics is always a matter of conflicting ethical views in society.

I will discuss this in greater detail in Chapter 4. I simply mention here that there was a debate between Roy Harrod, a Keynesian, and Lionel Robbins, then a disciple of Mises, which took place in 1938. Robbins argued against the idea that there should be a graduated tax on income. Those who favored it said that the value to the rich man of one additional unit of income is much less than the value of this unit of income to a poor man. Therefore, the state is justified in extracting a higher percentage of taxes from the rich man than from the poor man. Robbins argued that there is no such justification, since we cannot make interpersonal comparisons of subjective utility. There is no objective value scale. He was correct on the basis of modern economic theory, which was first promoted by Carl Menger in

1871. "Hold on," said Harrod. If that is the case, then no economist can legitimately make any recommendations about anything in the name of science. Robbins backed off from his position. He did not want to surrender the idea that economists, as scientists, can offer legitimate and accurate advice to governments. But he never explained why his original argument was not accurate. It *was* accurate, given his presuppositions about subjective value theory. I discussed this debate at considerable length in Chapter 5 of *Sovereignty and Dominion*.

Almost a decade earlier, Frank H. Knight, the founder of the Chicago School of economics, had reached the same conclusion. In a 1929 essay, "Freedom as Fact and Criterion," he announced: "No *discussion of policy* is possible apart from a moral judgment." Then he wrote this: "Freedom and coercion are ethical categories, and the only question in regard to which *discussion* can possibly be carried on is the question of what power *ought* to be exercised, or how and under what circumstances. Why should one not be as free to use political power as economic power? As far as the mere notion of freedom is concerned, there is no reason why the majority in a democratic state, or the sovereign group in any state, should not dispossess and exploit the rest of society at their pleasure." This essay is Chapter 1 of his 1947 collection of essays, *Freedom and Reform*.

Even more to the point is Knight's 1939 essay, "Ethics and Economic Reform," printed as Chapter 4. He used the ethical term "vice" to describe the social theory of our era. "One of the vices of Western thought in the social sciences and of certain of the most popular schools of philosophy is that of 'reducing' value judgments to statements of preference, asserting that 'this is better' or 'ought to be done,''really' means merely, 'I like it'" (p. 49). Yet this is exactly what all schools of free market economic thought assume, not excluding Chicago School economics. The men whom Knight taught at Chicago adopted exactly this view of ethics and social thought. This is why they sought to avoid all ethical elements in their economic theories. Knight was a nineteenth-century liberal, as he forthrightly admitted. He believed in what is sometimes called the night-watchman state. So did the most famous members of the University of Chicago's economic department, beginning in the 1940s. But they refused to integrate their economic theory with this view of the older liberalism. They insisted that economic theory is value-free. If it really is, then it is useless, Knight taught. "Every social order, in fact all organized action, all social life in all human life, is

necessarily ethical, in so far as its character is a matter of deliberation and conscious acceptance on the part of its participants" (p. 48).

Economists do not persuade most politicians, let alone the masses, of much of what they say. Why is this? Because people operate in terms of ethics. They also operate in terms of self-interest. They want to believe that their self-interest is consistent with their ethics. They search for an economist to justify whatever compromise they have worked out between their ethics and their economic self-interest. So, there is always a market for an economist to come in the name of economic science to argue for whatever the person or special-interest group is paying him to recommend. The economist is willing to devise arguments to favor whoever is providing the funding. As an academic, he has invoked the myth of neutrality: what he is doing as a scientific economist has nothing to do with ethics. The special-interest group that is putting up money for him to argue for whatever is beneficial to the special-interest group is willing to go along with this deception, since it helps the special-interest group to hire someone who claims to be an ethically neutral scientist. The special-interest group is not about to hire some other economist who argues against the policy promoted by the special-interest group, also in the name of value-free economic science. The political game goes on.

The economist who claims to be ethically neutral also claims that there is no cause-and-effect relationship between ethics and economic outcomes. He claims to be able to evaluate economic causation in the name of efficiency alone. This standard of efficiency is also supposed to be evaluated in non-ethical terms. Step-by-step, from the initial assumption of ethical neutrality and therefore ethical autonomy, the economist extends this doctrine of neutrality to every area of life that is governed by economic causation. He argues that the assumption of the myth of neutrality provides workable analytical tools to investigate every area of life that is subject to scarcity, which means every area of life. His concept of economic efficiency also rests on the myth of neutrality. But it is clear from Jesus' parable of the barn builder that this assumption is wrong. It is dead wrong. It is eternally dead wrong.

The issue here is causation in history. The humanist believes that the God of the Bible is irrelevant to historical causation, except in so far as people may believe in such a God, and then take actions in terms of this belief. Humanists are willing to grant that individuals who believe in the

God of the Bible may have influence, but they are dedicated to the proposition that there is no such God, no law-order created by God, and no causation that is based on God's authority, the Bible's authority, and the structure of society.

Economists are convinced that the laws of economics are autonomous. These laws are not dependent upon politics. They are not dependent upon a particular legal order. They are built into the market order. They are superior in operational impact than opinions regarding religion, politics, and jurisprudence. Any interference with these economic laws of the market order by religion, politics, and jurisprudence will reduce the efficiency of participants in the market order. In other words, there are costs to ignoring the laws of economics, and therefore the laws of economics should be honored by people who want greater economic efficiency, greater output, and therefore greater wealth. If this means dishonoring the laws of religion, politics, and jurisprudence, the officially neutral economist says that he has no scientific opinion on this matter, but it is clear from his writings that he does have an opinion. People should honor the laws of the market, not any other laws, if they want to get richer. Economists have this on their side: most people want to get richer. We are back to point three of the covenantal laws of economics (Chapter 2): "People prefer more."

B. Value-Laden Economic Theory

Christians must take a stand against the doctrine of the myth of neutrality. Jesus said: "The one who is not with me is against me, and the one who does not gather with me scatters" (Matthew 12:30). Specifically, they must take a stand against this doctrine as it applies in the field of economic causation. *There should be no discussion of economic efficiency apart from ethics*. The barn builder was efficient. He had a growing business. He needed more barns to store the grain. From the point of view of economic efficiency, he was a success. But Jesus made it clear that he was not a success. He was a failure.

Christian scholars should begin with this presupposition: *the myth of neutrality is false*. It is a myth based on worldly self-interest. Christian economists should therefore begin with the presupposition that the myth of value-free economics is a myth. The myths is related to the doctrine of intellectual autonomy. It rests on the assumption that God is not in charge, and God's Bible-revealed laws are not authoritative in history. It rests on the

assumption that there is no cause-and-effect relationship between biblical law and success or failure in history.

It is possible to have success in history without acknowledging the God of the Bible or the authority of God's law. The barn builder clearly was such a person. But to imagine that the barn builder was correct in his assumption that neither God nor God's ethical standards applied to his life is to join with the barn builder in his rebellion against God. It is to give encouragement to other barn builders who operate with the same presupposition. The presupposition is wrong.

Because there is such a thing as common grace, it is possible for barn builders and their apologists to justify his actions in the name of meeting consumer demand. This rests on the presupposition of the sovereignty of the consumer. Free-market economist W. H. Hutt came up with this term: "consumer sovereignty." It was incorrect in at least two ways. First, sovereignty is a legal category, not an economic category. It has to do with ownership. The consumer is no more sovereign than the seller. They are both sovereign legally. They both own property. This sovereignty is derivative. It has to do with the delegated sovereignty of the dominion covenant. Second, consumer sovereignty confused the concept of economic authority with legal sovereignty. Economic authority has to do with dominance in a market. The consumer is dominant in a free market because he owns money, which is the most marketable commodity. He is dominant alongside other consumers, who also have money, and who bid to be served by producers. A great advantage of the free market is that it grants this authority to consumers. But this does not mean that consumers are sovereign. They are not sovereign. Neither are producers. God is sovereign. He lays down the rules of success and failure in ownership. He then enforces the rules that He has laid down.

This is why the Christian economist who is systematic in his defense of an exclusively Christian approach to economics has to maintain that economics is value-laden, not value-free. Success or failure in the field of resource allocation is governed by ethical standards. These standards apply to history because they have implications for eternity. The barn builder was unwilling to acknowledge this. Jesus did not criticize him for building barns. He criticized him for not paying attention to who owned his barns, namely, the Creator God of the Bible. The God of the Bible insists that there is more to economic efficiency than temporal economic efficiency in a com-

petitive market. Men are not wise in selecting an efficient way to go to hell. They should be willing to accept a reduction in their temporal efficiency for the sake of not going to hell.

The Bible provides two primary ethical standards for judging whether or not you have chosen an economically efficient way to go to hell. The first is the weekly sabbath. The second is the tithe. Someone who conducts his business by personally taking one day a week off is conducting his business according to God's standards. Someone who gives 10% of his net income to his local church has conformed to the law of the tithe, as I explain in Chapter 45. Someone who does both of these things has preliminary evidence that he is conducting his affairs in an efficient way. His actions do not testify against him.

The economist who comes in the name of Christ has an obligation to point out to readers that there is more to economic efficiency than temporal profitability. An individual had better make up his mind whose kingdom he is working to build. He should make up his mind whether to serve God or mammon. The Christian economist owes it to his reader to tell him about the Christian laws of economics, which are not the same as the laws of economics that are described by humanistic economists in their textbooks, treatises, and scholarly journal articles.

Conclusion

In Chapter 7 of the *Student's Edition*, I argued that the humanistic economist presupposes the autonomy of man. This presumed autonomy is cosmic. Man is presumed not to be under the authority of the God of the Bible. More specifically, the humanistic economist argues that economic science is autonomous. It is not under the authority of any ethical system or any other system of causation. Economists have been saying this longer and louder than other social scientists. This began in the late seventeenth century with a group of British economists known today as mercantilists. This is the argument of William Letwin in his book, *The Origins of Scientific Economics* (1963).

This argument rests on what I have designated as the myth of neutrality. This myth goes back to classical Greek philosophy, but it has been basic to higher education ever since civil governments began using taxpayers' money to establish and operate educational institutions. The justification for using confiscated money to finance education has been that education is ethi-

cally neutral, and therefore no taxpayer's money is being used to subsidize an enterprise that he is philosophically or ethically opposed to. This justification has been utter nonsense from day one, but it is the universal belief of the world's most widely accepted tax-funded religion today: the tax-funded educational system. *Any attack on the myth of neutrality is inescapably an attack on tax-funded education.* This is recognized clearly by members of the various academic guilds. They hold their positions of authority and above-market salaries because of the widespread acceptance of the myth of neutrality.

Christian theory in every area of academics must begin with the denial of the myth of neutrality. To deny the myth of neutrality is inescapably to affirm the authority of some ethical world-and-life view. The Christian scholar should defend a Bible-based world-and-life view. This is why no Christian should accept the legitimacy of the claim that any academic enterprise is ethically neutral. This is also why economic theory is not value-free. Every academic discipline is value-laden. Within the social sciences, none is more insistent on value neutrality, and therefore there is no greater discrepancy between theory and practice than economic theory. The Christian reconstruction of economic theory must therefore begin with the presupposition that there is no such thing as value-free economic theory.

4

EPISTEMOLOGY

Pilate then said to him, "Are you a king then?" Jesus answered, "You say that I am a king. For this purpose I have been born, and for this purpose I have come into the world, so that I would bear witness to the truth. Everyone who belongs to the truth listens to my voice." Pilate said to him, "What is truth?" (John 18:37–38a).

Analysis

This is a famous confrontation. It is representative of the perpetual conflict between the person who claims to speak the truth and the skeptic who rejects all such claims. Pilate was a committed skeptic. Immediately after invoking the rhetorical question of every skeptic—"What is truth?"— he left the room. He did not wait for Jesus to answer. He was not interested in the answer. He was not about to acknowledge to Jesus that he believed that Jesus was in a position to provide an answer. Pilate was not interested in philosophy. He trusted power, not logic. He represented the Roman state. He possessed the power of life and death.

In a second confrontation a few minutes later, Jesus remained silent when Pilate attempted to cross-examine him. Exasperated, Pilate reminded Jesus of the power he had over him. "Are you not speaking to me? Do you not know that I have power to release you, and power to crucify you?" (John 19:10a). Jesus answered: "You do not have any power over me except for what has been given to you from above" (v. 11a). We see here the age-old confrontation between biblical religion and power religion. This was a recapitulation of the confrontation between Moses and Pharaoh. Jesus made it clear to Pilate how little He thought of Pilate's authority, i.e., his political office in a hierarchical chain of state command. Moses had made this equally clear to Pharaoh. It cost Pharaoh his life (Exodus 14:26–28). It cost Jesus His life. But Jesus had already told His disciples that this would be His decision, no one else's. "I am the good shepherd, and I know my own, and my own know me. The Father knows me, and I know the Father, and I lay down

my life for the sheep. I have other sheep that are not of this sheep pen. I must bring them also, and they will hear my voice so that there will be one flock and one shepherd. This is why the Father loves me: I lay down my life so that I may take it again. No one takes it away from me, but I lay it down of myself. I have authority to lay it down, and I have authority to take it up again. I have received this command from my Father" (John 10:14–18).

This was a life-and-death decision. The confrontation between Jesus and Pilate was preliminary to Pilate's highly political decision to execute Jesus. The outcome of the exchange was based on Pilate's desire to please the Jewish leaders. He thought this would eliminate his problem. It did not. He thought that philosophical skepticism would justify his decision. It did not. He had some trace of conscience. He wanted to evade responsibility. "So when Pilate saw that he could not do anything, but instead a riot was starting, he took water, washed his hands in front of the crowd, and said, 'I am innocent of the blood of this innocent man. See to it yourselves'" (Matthew 27:24). He thought that making a public declaration of innocence and washing his own hands would relieve him of all legal responsibility. It did not.

A. Epistemology and Truth

Epistemology is the study of knowledge. As I wrote in the Introduction to Part 1, it asks a two-part question: "What can man know, and how can he know it?" Not many people ever ask this question. Certainly, Pilate did not. It is a theoretical question. Most people are not interested in theoretical questions. If there are not practical answers, most people do not want to spend a lot of effort investigating theoretical questions. But this does not mean that people do not make specific assumptions about the nature of truth and how it is known. They have presuppositions about the nature of truth, but they do not give a lot of thought to these presuppositions.

From the early days of the Christian church, there have been philosophical defenders of the faith who challenged the anti-Christian presuppositions and conclusions of their generation. They defended the faith by means of logic, but in virtually all cases, they invoked the ideas and names of the philosophers of their generation who had great prestige among the non-Christian intellectuals around them. They felt compelled to defend Christianity by means of selective aspects of non-Christian philosophies. They assumed that there is a common ground philosophically between non-Christian philosophy and Christian philosophy. To that extent, they compromised

the faith. That was the argument of my teacher, Cornelius Van Til. His was a revolutionary defense of the faith. He broke with almost two millennia of Christian philosophical tradition. He refused to invoke a common logical ground between covenant-breakers and covenant-keepers.

This may not seem important to you at this stage of your intellectual career, but it will become important if you decide to accept the calling of becoming a Christian economics scholar. It will be crucial if you decide to become any kind of Christian scholar. In the world of humanism today, Christians are challenged on this basis. "Christians are not logical. They do not argue in the way that humanists argue. They assume that God exists. They assume that the God of the Bible is real. They assume the revelation in the Bible is the foundation of truth. They appeal to the Bible and not to some covenant-breaking philosopher." Most classroom professors do not invoke the name of a covenant-breaking philosopher. They are almost certainly disciples of Immanuel Kant, but hardly any of them has ever read the major works of Kant. They have never struggled with the philosophical issues that Kant struggled with: the nature/freedom dualism, the science/personality dualism, and the objective/subjective dualism. They are not philosophers. They do not intend to become philosophers. Still, they assume that the Bible is not the doorway to truth. They assume that it is not legitimate to invoke the Bible in establishing truth. This is their presupposition. They cannot defend it intellectually in most cases, but they hold it nonetheless.

Despite the philosophical weakness of anti-Christian critics, Christians have become victims of an epistemological inferiority complex. This has been going on for almost 2,000 years. They take seriously the claims of their critics. They feel compelled to defend the Bible, but they do not defend it on the basis of its own self-revelation and self-testimony. They attempt to defend its teachings by adopting arguments that were developed by some philosopher prior to Kant. For example, they invoke natural law theory. First, they are completely unaware that natural law theory was developed by Roman philosophers who were attempting to justify the rule of the Roman Empire: a judicially unified empire ruling over the local gods, laws, and customs of formerly autonomous subject cultures. They invented a supposedly common logic for political purposes. Second, they are unaware that virtually no one in the modern world accepts natural law theory. Kant refuted it decisively. Christians are attempting to resurrect a dead horse in a world of tanks.

I am writing this chapter as a way to immunize you if you are impressed by the argument of anti-Christian economists that the Bible is an unreliable guide for formulating the principles of economic theory. Anti-Christian economists are joined by anti-Christian academicians in every other field of thought. Because you are interested in economics, you deserve to be immunized against the same kinds of arguments that are invoked against Christian academics in every field. I do not want you to do what most Christian academics do, namely, adopt some of the findings of the anti-Christian worldview that predominates in their field, but do so in the name of the Bible. I want you to be confident that the Bible is a reliable guide for solving economic issues that have not been solved by economists, but who nevertheless insist on the autonomy of economic science. It is not autonomous. They are self-deluded.

B. Epistemology and Methodology

Epistemology today is a highly specialized field in the academic discipline of philosophy. It is not a popular field of study outside of philosophy. Yet in every academic discipline, scholars and students do their work in terms of the epistemological categories established by philosophers. These bread-and-butter practitioners are generally ignorant of these categories. They have not taken a course in general epistemology. They have not taken a course in the epistemology of their specific discipline. Such courses are not offered. There is a universal lack of interest.

There may be an upper-division college course on methodology in the economics department. This course is very loosely related to epistemology. It covers general principles undergirding the goals and intellectual tools of the discipline. It does not discuss the philosophical foundations of these tools. These courses are not popular with most professors, let alone students. In 1952, Professor Fritz Machlup of Princeton University remarked at a meeting of the American Economic Association: "Usually only a small minority of American economists have professed interest in methodology. The large majority used to disclaim any interest in such issues." This remains true over six decades later.

An exception to this lack of interest in methodology was Ludwig von Mises. Machlup recognized this. He had been a follower of Mises in Austria before World War II. They were close friends. In 1949, Yale University Press published Mises' magnum opus, *Human Action*. The first three chapters

were devoted to the logic of economic theory: pages 10–91. First-time readers of the book ever since have struggled to get through this section. This book appeared late in Mises' career. But this was not the first time he had discussed methodology. In January 1933, his first book on methodology was published in German. This was a collection of essays that he had written in the 1920s. The book was not translated into English until 1960: *Epistemological Problems in Economics*. It was really not about epistemology. It was about methodology, a narrower subject. In 1962, another short book by Mises was published: *The Ultimate Foundation of Economic Science*. It surveyed all of the themes that the two earlier books had covered. In the Preface, he declared in his opening words: "This essay is not a contribution to philosophy. It is merely the exposition of certain ideas that attempts to deal with the theory of knowledge ought to take into full account." I take his words seriously. This was not a book on philosophy. Yet this was as close to epistemology as most economists ever get. I analyze Mises' writings on methodology in Appendix A. I compare his views with a famous article on methodology by Milton Friedman.

There is a major book on the methodology of economics that interacts with modern physics: Nicholas Georgescu-Roegen's *The Entropy Law and the Economic Process*. It deals with the relationship between cosmology's crucial principle, the second law of thermodynamics, and economic theory. It was published by Harvard University Press in 1971. It is still in print. The text is 458 pages long. Most of it is readable if you pay close attention, but it is not easy to read. I cannot remember ever having seen any economist footnote it. Other economists do not interact with it. Four reviews were summarized in 1973 in a relatively obscure academic journal, *The Journal of Economic Ideas*, but then it disappeared.

Economists are not different from practitioners in other academic disciplines. They do not have a clear understanding of the relationship between philosophy and their disciplines. They are not interested in discovering such a relationship. They do not think it is important. They go about their academic tasks with varying degrees of diligence, but remain silent on epistemology. They are not criticized for doing this by their peers, who do the same thing. They are not criticized by scholars outside their disciplines, because those scholars also do the same thing. There are no academic liabilities or institutional liabilities for never presenting any discussion about the relationship between their minds and the world around them.

In this era of statistics, econometrics, and mathematics-defended economic theory, economists have adopted the trappings of physics. Here is a crucial question: "How is it that intelligent minds can use mathematics to explain cause-and-effect in the natural world?" Physicists, chemists, and other natural scientists search for such relationships. They are rewarded when they find them. But they do not discuss in detail how it is that they can do this. One of the rare exceptions to this silence was Eugene Wigner, a physicist who won the Nobel Prize in 1963. In 1960, he wrote an article for an academic journal in mathematics. The article had a provocative title: "The Unreasonable Effectiveness of Mathematics in the Natural Sciences." I quoted from it in the Introduction to Part 1. Here is the problem that Wigner acknowledged, but which his peers choose to ignore, and still do.

> It is true, of course, that physics chooses certain mathematical concepts for the formulation of the laws of nature, and surely only a fraction of all mathematical concepts is used in physics. It is true also that the concepts which were chosen were not selected arbitrarily from a listing of mathematical terms but were developed, in many if not most cases, independently by the physicist and recognized then as having been conceived before by the mathematician. It is not true, however, as is so often stated, that this had to happen because mathematics uses the simplest possible concepts and these were bound to occur in any formalism. As we saw before, the concepts of mathematics are not chosen for their conceptual simplicity—even sequences of pairs of numbers are far from being the simplest concepts—but for their amenability to clever manipulations and to striking, brilliant arguments. . .
>
> It is difficult to avoid the impression that a miracle confronts us here, quite comparable in its striking nature to the miracle that the human mind can string a thousand arguments together without getting itself into contradictions, or to the two miracles of the existence of laws of nature and of the human mind's capacity to divine them. The observation which comes closest to an explanation for the mathematical concepts' cropping up in physics which I know is Einstein's statement that the only physical theories which we are willing to accept are the beautiful ones. It stands to

> argue that the concepts of mathematics, which invite the exercise of so much wit, have the quality of beauty. However, Einstein's observation can at best explain properties of theories which we are willing to believe and has no reference to the intrinsic accuracy of the theory.

He concluded his readable essay with these words: "The miracle of the appropriateness of the language of mathematics for the formulation of the laws of physics is a wonderful gift which we neither understand nor deserve. We should be grateful for it and hope that it will remain valid in future research and that it will extend, for better or for worse, to our pleasure, even though perhaps also to our bafflement, to wide branches of learning." (http://bit.ly/WignerScience) The use of the word "miracle" is rare in academic circles.

Modern economics, as revealed in the most prestigious academic journals, uses formal mathematics extensively. Indeed, it seems as though economists believe that only by imitating physicists can they begin to approach economic truth, and even more important, sufficient academic respect to gain tenure. Mises opposed the use of mathematics in economic theory from the beginning. He argued that the logic of mathematics does not apply to the logic of making decisions. But he was not followed in this rejection of mathematics by members of the economics profession.

I remember clearly a discussion that I had with a professor of economics at the University of California, Riverside, probably in the spring semester of 1965. His name was Carl Uhr. He was the best-known economist in the department, which was not well-known. He had written a book a few years earlier on the economics of the Swedish economist, Knut Wicksell, an influential, non-mathematical economist who wrote early in the twentieth century. It was the only thing that Uhr ever wrote that gained attention from his peers. A Google search reveals little else about him. I mentioned my skepticism regarding the use of mathematics in economics. He responded as follows: "We are mowing down with machine-gun precision those economists who do not use mathematics." Yet he used no mathematics in his book. He taught the history of economic thought, the non-mathematical corner of the economics curriculum. So, when he said "we," he did not mean himself. He had escaped the machine-gun nest, which had been sporadic in his pre-Keynesian graduate school days, so he was safe and se-

cure in his tax-funded tenure. Nevertheless, his machine-gun metaphor was a memorable image. It accurately summarized what was happening in the economics academic guild. (A major economist who escaped this machine gunning was Ronald Coase, who won the Nobel prize in 1991. His deservedly famous essay, "The Problem of Social Cost" [1960], is probably the most widely quoted economics journal article ever written. His handful of articles written before that one also did not use mathematics. Coase used verbal logic.)

When I critique economic science's epistemology, I survey the fundamental issue of epistemology: "What can men know, and how can they know it?" I do not discuss Kant in detail, whose philosophy undergirds almost all modern thought. This is because economists never discuss Kant in detail. They avoid epistemology like the plague. I have long relied on the writings of Van Til to guide me through the minefield of epistemology, especially Kant's. But my brief survey here is not a crippling liability. The most self-conscious of the handful of economists who discuss epistemology occasionally invoke Kant's name, but they do not cite his *Critique of Pure Reason* (1781) or his *Critique of Practical Reason* (1787). I am unaware of any secondary sources of Kantian logic that those few economists who discuss epistemology rely on. I doubt that there is such a book. For better or worse, I have relied on Richard Kroner's book, *Kant's Weltanschauung* (1914), which was translated into English in 1956.

C. Humanism's Philosophical Dualism

By dualism, I mean an irreconcilable logical contradiction. I mean two hermetically sealed-off positions, both of which are said to be true, but which are logically contradictory. I am speaking of the fundamental dualism of humanism*: the hypothetically unchanging logic of the mind vs. the constant flux of the world around us.* I have in mind the world of nature, organic and inorganic. I also have in mind the flux of human history. How are theory and history related? How are they connected, thereby enabling man to say anything coherent about anything outside his mind?

Van Til described this as the dualism of Parmenides and Heraclitus, a pair of sixth-century B.C. Greek philosophers. Parmedides argued that logic is consistent and unchanging. Heraclitus argued that the world is always in flux. This raised a question: "What does unchanging logic have to do with constant flux?" It was this question: "What is the point of contact between

them?" According to Van Til, Plato attempted to reconcile the two positions, but he failed. He could never show how the hypothetical realm of unchanging Ideas or Forms could influence or even connect to the constantly changing matter that constitutes history. Western philosophy ever since has been unable to reconcile them. Eastern philosophy does not try. This is the problem that Wigner raised with respect to the connection between the logic of mathematics and certain operations in the physical realm around us.

This is the problem of every theorist. He attempts to find continuities in the world around us, continuities that can be discovered by means of the observation of facts and then assessment by logic. But if logic does not change, and the world around us is in constant flux, how does unchanging logic intersect with constant flux? Next question: "Should new facts force the theorist to revise his theory?" If he does not revise his theory, will his theory become irrelevant over time? Mises argued that his theory of economics, being deductive, would not change over time. But his most famous disciple, F. A. Hayek, was a consistent evolutionist. He concluded that, under some future evolutionary social conditions, it may be mandatory to revise what we regard today as irrefutable logical analyses of the market. (I discussed this in Appendix B of my 2012 book, *Sovereignty and Dominion*. I discussed it first in 1982 in Appendix B of the original version of that book, *The Dominion Covenant: Genesis*.)

Here is the biblical solution. There is ethical and judicial constancy in the world. This constancy comes from the constancy of God. "God is not a man, that he should lie, Or a human being, that he should change his mind" (Numbers 23:19). "For I, the Lord, have not changed; therefore you, sons of Jacob, have not come to an end" (Malachi 3:6). "Every good gift and every perfect gift is from above. It comes down from the Father of lights. With him there is no changing or shadow because of turning" (James 1:17). [North, *The Epistles*, ch. 34.] God is not surprised at any turn of events. He is sovereign over events.

In contrast is modern philosophy. It is unable to provide a systematic explanation of how the logic of men's minds, or at least very smart men's minds, understands the flux around us. The humanist believes that there is an interconnection. His seemingly best example is mathematics. But if the mathematician is also incapable of solving this issue, as Wigner argued is the case, then the humanist is in trouble.

The humanist is in very big trouble.

D. Kant's Irreconcilable Dualism

Van Til emphasized throughout his long career that modern thought is plagued by an epistemological dualism that can be traced back to Kant. Kant divided reason into two radically separate realms, the phenomenal and the noumenal. The phenomenal realm is the realm of scientific calculation, of measurable cause and effect. Effects have specific causes. In this sense, effects are determined by their causes. It is this determinism of the phenomenal realm that is the basis of all scientific investigations (except in the subatomic world of quantum mechanics, where there are crucially important effects which have no known or knowable causes—in fact, which are believed by scientists to have no physical causes).

In the phenomenal realm there is no choice. There is no responsibility. Everything is determined. Yet Kant proclaimed the legitimacy of ethics. He did so by affirming another realm, which he called the noumenal. But he could not show how the two realms were related. They were autonomous. Van Til called this the *science/personality* dualism and the *nature/freedom* dualism. If nature's causation is governed by unbreakable law, then so is man. Man is the product of nature. But if man is determined by scientific cause and effect, he does not possess freedom. Kant put the problem this way in *The Critique of Pure Reason*: "We have, therefore, nothing but nature to which we must look for connection and order in cosmical events. Freedom—independence of the laws of nature—is certainly a deliverance from restraint, but it is also a relinquishing of the guidance of law and rule. For it cannot be alleged that, instead of the laws of nature, laws of freedom may be introduced into the causality of the course of nature. For, if freedom were determined according to laws, it would be no longer freedom, but merely nature."

Man loses his freedom, which is swallowed by impersonal nature. Man can claim to be free only by claiming to be somehow outside of the laws of nature, meaning outside of nature's deterministic laws of cause and effect. Kant put it this way: "We must understand, on the contrary, by the term freedom, in the cosmological sense, a faculty of the spontaneous origination of a state; the causality of which, therefore, is not subordinated to another cause determining it in time." But if man is in some unstated and undefinable way distinct from nature, and therefore not completely determined by nature's unbreakable laws of impersonal, purposeless causation, there is no

way to explain logically how man can control any aspect of nature from outside of nature. There is no point of contact. There is therefore no lever of control. He loses power. On the other hand again, if he does somehow gain power over nature, then he is in principle subject to other men's power over him, since they may be able to manipulate nature more efficiently than he can. It's "damned if you do, damned if you don't." This is Kant's legacy to modern man.

In a world of predictable and therefore inescapable physical cause and effect, human freedom disappears. So does the reality of ethical behavior, given the worldview of humanism, for such behavior is based on the independent (autonomous) existence of freely determined human choice. Responsible men are regarded as more than mere biological counting machines. Calculating machines are neither moral nor immoral. They do not choose; they simply respond to inputs according to their humanly designed programs. *How can personal responsibility exist in a world of determinism?* Kant attempted to salvage both freedom and ethics by positing the existence of an independent (autonomous) noumenal realm of the human personality, or human spirit, which he argued is also the realm of ethical choice. This realm is not under the strict physical determinism that governs the phenomenal realm. The noumenal realm is marked by human freedom and responsibility.

The crucial intellectual problem for the humanist is this: neither Kant nor any philosopher, neither the psychologist nor the social theorist, has been able to describe or explain the link between these two realms. To the extent that the noumenal can be classified, defined, and described rationally in terms of the phenomenal realm's logic, it loses its character as a realm of pure indeterminism. Yet Kant said that this pure indeterminism must be present in order for there to be a realm of human choice, of human action as distinguished from determined human response. *For all post-Kantian thought, man without the noumenal becomes an automaton*. He does not act. He merely responds to stimuli.

Without the ability to think coherently about cause and effect, including ethical cause and effect, man is left adrift in a sea of irrationalism. *How can personal responsibility exist in a world of irrationalism?* Madmen who break the law or ignore conventions are generally treated as outside the law, and are incarcerated. Thus, the total freedom of the noumenal leads directly to the literal straightjacket of phenomenal judgment and the loss of

freedom. The key unanswered problem is this: "How is the life of man's spirit related to his visible walk?" Humanist thought has no solution.

This problem is not merely a speculative exercise of philosophers. It has inescapable consequences in every area of life, including the science of economics. A crisis in general epistemology produces crises in specific epistemologies. Ultimately, of course, it is a crisis in ethics, for ethics in the Kantian worldview is governed (yet somehow not determined) by the noumenal.

Virtually all modern humanistic scholarship relies on two foundations: the philosophy of Immanuel Kant and the evolutionary worldview of Charles Darwin. This fact is never discussed at the beginning of a college-level textbook in any academic discipline. There is no mention of philosophical foundations. There is no mention of the presuppositions undergirding these foundations. Students are introduced to the field on the assumption that there is no debate over the reliability of these philosophical foundations. I would not call this a self-conscious strategy on the part of the textbook authors. Rather, it is part of the ongoing comprehensive naïveté of modern scholars. They are never taught the basics of epistemology in their college careers. They are also not taught the connections between these foundations and the methodological assumptions of their academic discipline. They naïvely assume what they need first to prove. They are incapable of proving it, but they get away with this because no one calls their bluff.

I have introduced this material in order to strengthen your self-confidence in pursuing the field of economics as a Christian scholar. Humanistic economists are like Goliath facing David. They look invincible. But they have a weak point in their armor. Their reliance on the philosophy of Kant is this weak point.

E. Mises and Kant

In his 1969 book, *The Historical Setting of the Austrian School of Economics*, Mises criticized the German economist Gustav von Schmoller for not having read these scholars: Wilhelm Windelband, Henrich Rickert, and Max Weber. Windelband was a Kantian. I have read Rickert's *Science and History: A Critique of Positivist Epistemology,* and I have read several books by Weber. I wrote a graduate school paper for Robert Nisbet on Weber's Kantian dualism, which I reprinted in the book I edited, *Foundations of Christian Scholarship: Essays in the Van Til Tradition* (1976). Mises did not

cite Kant's writings, only his name. I am not saying that he had not read Kant. He just did not think it was important to discuss Kant.

As with Windelband, Mises was a Kantian. Mises did not escape Kant's nature/freedom dualism. He wrote the following early in *Human Action*.

> Reason and experience show us two separate realms: the external world of physical, chemical, and physiological phenomena and the internal world of thought, feeling, valuation, and purposeful action. No bridge connects—as far as we can see today—these two spheres. Identical external events result sometimes in different human responses, and different external events produce sometimes the same human response. We do not know why.
>
> In the face of this state of affairs we cannot help withholding judgment on the essential statements of monism and materialism. We may or may not believe that the natural sciences will succeed one day in explaining the production of definite ideas, judgments of value, and actions in the same way in which they explain the production of a chemical compound as the necessary and unavoidable outcome of a certain combination of elements. In the meantime we are bound to acquiesce in a methodological dualism (I:3).

Natural scientists will never succeed in explaining the production of ideas, value judgments, and actions as precisely as they explain causal connections between physical events. People are not machines, nor are they digital algorithms. They are made in God's image. They are uniquely personal, just as God is. The Bible offers a different explanation for historical causation, animate and inanimate: *God's sustaining providence.* Mises rejected the idea of God's sustaining providence. "The scientific theory as developed by the social philosophy of eighteenth-century rationalism and modern economics does not resort to any miraculous interference of superhuman powers" (VIII: 2) He rejected the Bible's concept of cosmic personalism. His viewpoint is echoed throughout the world of social scientists. This is why there is a need for the reconstruction of all social science by Christian scholars.

F. The Biblical Foundation of Truth

1. Knowing and Doing

The Apostle Paul wrote this to his disciple Timothy: "All scripture has been inspired by God. It is profitable for doctrine, for conviction, for correction, and for training in righteousness. This is so that the man of God may be competent, equipped for every good work" (II Timothy 3:16–17). This declaration of biblical authority was not merely a declaration regarding the final earthly authority of truth: Scripture. His was a declaration of service. The focus of Paul's concern was on thought and action. This was also James' focus. "Be doers of the word and not only hearers, deceiving yourselves. For if anyone is a hearer of the word but not a doer, he is like a man who examines his natural face in a mirror. He examines himself and then goes away and immediately forgets what he was like. But the person who looks carefully into the perfect law of freedom, and continues to do so, not just being a hearer who forgets, this man will be blessed in his actions" (James 1:22–25). Both men affirmed, as did Leviticus 26, Deuteronomy 28, and several Psalms, that *there is a predictable connection between biblical ethics and economic outcomes*. The connection applies to individuals. "Blessed is the man who does not walk in the advice of the wicked, or stand in the pathway with sinners, or sit in the assembly of mockers. But his delight is in the law of the Lord, and on his law he meditates day and night. He will be like a tree planted by the streams of water that produces its fruit in its season, whose leaves do not wither; whatever he does will prosper. The wicked are not so, but are instead like the chaff that the wind drives away. So the wicked will not stand in the judgment, nor sinners in the assembly of the righteous. For the Lord approves of the way of the righteous, but the way of the wicked will perish" (Psalm 1:1–6). [North, *Psalms*, ch. 1] It also applies to collectives, such as nations. Moses spoke to the assembled generation of the inheritance just before the conquest of Canaan.

> He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to

> your fathers, as it is today. It will happen that, if you will forget the Lord your God and walk after other gods, worship them, and reverence them, I testify against you today that you will surely perish (Deuteronomy 8:16–19).

How can men know what God requires of them, both individually and corporately? They must go to the Bible in search of God's laws. They must then learn to apply these general laws to specific ethical circumstances: casuistry. This includes economic circumstances.

2. The Covenantal Connection

How is casuistry possible? How can men grasp the connection between written laws in the Bible and history, which is always changing? By the exercise of their God-given judgment: point four of the biblical covenant. Paul wrote: "For it is not the hearers of the law who are righteous before God, but it is the doers of the law who will be justified. For when Gentiles, who do not have the law, do by nature the things of the law, they are a law to themselves, although they do not have the law. By this they show that the actions required by the law are written in their hearts. Their conscience also bears witness to them, and their own thoughts either accuse or defend them to themselves and also to God. That will happen on the day when God will judge the secrets of all people, according to my gospel, through Jesus Christ" (Romans 2:13–16). He did not say that the law is written on the hearts of covenant-breakers. He said that *the actions required by the law* are written in their hearts. The author of the Book of Hebrews, citing Jeremiah 31:31–34, said that Jeremiah's prophecy is fulfilled in the New Covenant. Jeremiah had prophesied that God would write the law on the hearts of redeemed people. The author concluded: "By calling this covenant 'new,' he declared the first covenant to be old, and what has become old and obsolete will soon disappear" (Hebrews 8:15). The Old Covenant order disappeared with the fall of Jerusalem in A.D. 70.

Paul spoke of the Holy Spirit and the mind of Christ. "The Spirit interprets spiritual words with spiritual wisdom. The unspiritual person does not receive the things that belong to the Spirit of God, for they are foolishness to him. He cannot know them because they are spiritually discerned. The one who is spiritual judges all things, but he is not subject to the judgment of others. 'For who can know the mind of the Lord, that he can in-

struct him?' But we have the mind of Christ" (I Corinthians 2:13–16). [North, *First Corinthians*, ch. 2] *Here is the foundation of Christian epistemology.* There is an original ethical unity in principle between God's laws and the minds of grace-redeemed people. This unity was fulfilled by Christ in history. This unity is established by God's judicial transfer of Christ's completed righteousness to redeemed people. Then they work out these principles in their lives. Paul wrote: "So then, my beloved, as you always obey, not only in my presence but now much more in my absence, work out your own salvation with fear and trembling. For it is God who is working in you both to will and to work for his good pleasure" (Philippians 2:12–13). [North, *Epistles*, ch. 20:C] Our ethical sanctification, i.e., our being set apart by God, is transferred definitively at the time of our conversion. We develop it progressively through our lives. It is announced finally by God at the final judgment.

This three-stage process—definitive, progressive, and final—applies to individuals. It also applies to covenantal collectives: local churches, nations, and economies. That was what Moses declared in Deuteronomy 8:18. There is positive feedback between covenant-keeping, economic blessings, and more covenant-keeping. "But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today." [North, *Deuteronomy*, ch. 22] The blessings had a purpose: *to confirm God's law-based national covenant.* There was a covenantal system of positive feedback between national obedience and visible national blessings. This has not changed in the New Covenant era.

3. The Humanists' Non-Connection

Humanistic economists agree on little. They do agree on this: there is economic scarcity. They define scarcity as follows: "At zero price, there is greater demand than supply." They also agree that it is the goal of all people to overcome economic scarcity in their lives. People want economic growth personally. So, the vast majority of economists affirm economic growth as a legitimate goal of society. Most of them see this as the supreme economic goal of nations. Adam Smith affirmed this in his famous book, which had this title: *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776). No critic argued against this national goal, but economists have disagreed greatly on the correct policies, individual and civil, to attain this goal.

Non-Christian economists face two major epistemological questions. First, on what ethical basis can they legitimately affirm the legitimacy of any collective goal? Second, how can they prove that there is a connection between specific government policies and economic outcomes?

What about this first goal, i.e., establishing the legitimacy for adopting the goal of national economic growth? Economists ever since 1871 have insisted that economic value is imputed subjectively by individuals. There is no such thing as intrinsic value, they insist. There is only subjectively imputed value. They have broken with the classical economists on this point. Classical economists had argued that value is infused into goods and services by either human labor or the cost of production. Post-classical economists began with a denial of this connection. In his book, *Principles of Economics* (1871), Austrian economist Carl Menger argued that economic value does not go from labor to goods. It goes from subjective imputations by individuals, who then compete against each other by bidding up prices, back to the goods required to produce consumer goods. *This new view was the triumph of nominalism over realism.*

Nominalism is a philosophy that goes back at least to the early fourteenth century. It argues that individual evaluation is the basis of our understanding of the world around us. Individuals name objects. Objects do not have intrinsic characteristics. The opposite view is realism. Realism holds that objects possess inherent characteristics. Men perceive these characteristics and name them accordingly.

Let me give an example. Consider the forbidden fruit. Adam was told not to eat from the forbidden tree. He disobeyed God. Why did this matter? Why was God so concerned about this? Was the forbidden fruit poison? No. But Adam died. So do we. Blaming poison or some physical aspect of the fruit would be the preferred argument of a realist. So, was the fruit merely a symbol? Did eating from the tree involve merely a symbolic violation of God's law? That would be the argument of the nominalist. I reject both approaches. I am a covenantalist. I argue that the tree was important judicially. There was a *legal boundary* around property owned by God. So, when Adam violated the boundary, he broke God's covenant. He stole from God. The result was God's judgment on his body and also on the creation that was under his authority (Genesis 3:17–19).

I wrote in Chapter 2 about the debate between realism (labor theory of value) and nominalism (imputed value) as it applies to economic theory.

Neither position holds up. Menger moved economic theory away from realism. But this raised a major problem for economists. It is a philosophical problem. It is also a practical problem. Different individuals impute different values to specific goods and services. There is no legitimate way scientifically for nominalist economists and policy-makers to declare that any policy affecting the collective is beneficial to all residents in the commonwealth. *There is no solution to this issue in a world of pure nominalism*. Economic value for a nominalist is subjective and individual. There is no objective measure of economic value or any other corporate value. There is no common measure. This conclusion was affirmed by Lionel Robbins in his 1932 book, *An Essay on the Nature and Significance of Economic Science*. There is no way to make scientific comparisons of subjective utility. Subjective utility is based on individual preferences: *this* rather than *that*. But my preference for this may not be your preference. There is no way that any government official can decide, based on the science of economics, which of us is correct.

> In the rough-and-tumble of political struggle, differences of opinion may arise either as a result of differences about ends or as a result of differences about the means of attaining ends. Now, as regards the first type of difference, neither Economics nor any other science can provide any solvent. If we disagree about ends it is a case of thy blood or mine—or live and let live, according to the importance of the difference, or the relative strength of our opponents. But, if we disagree about means, then scientific analysis can often help us to resolve our differences. If we disagree about the morality of the taking of interest (and we understand what we are talking about), then there is no room for argument. But if we disagree about the objective implications of fluctuations in the rate of interest, then economic analysis should enable us to settle our dispute (p. 134).

The debate over economic value is always a debate over ethics. Economic value is not objective, says the nominalist. Therefore, there is no way to get from subjective individual valuation to what Robbins called the "objective implications." Robbins concluded: "Faced with the problem of deciding between this and that, we are not entitled to look to Economics for the

ultimate decision. There is nothing in Economics which relieves *us* of the obligation to choose. There is nothing in any kind of science which can decide the ultimate problem of preference" (p. 136). But when he said "us," he meant individuals. Individual valuation does not solve the epistemological problem of identifying the collective valuation. *There is no collective valuation in the nominalist's world*. No economist has offered a scientific solution to this problem of aggregation of individual subjective valuation. I contend that no economist ever will.

In Chapter 3, I discussed a debate that took place between Robbins and Keynesian economist Roy Harrod in 1938. The debate was published in the scholarly journal that Harrod edited, *The Economic Journal*. Harrod pointed out that if Robbins was correct about the inability of economists to make interpersonal comparisons of subjective utility, then there is no role for the economist as an advisor to policy-makers. Harrod's point was accurate: *every recommendation to a policy-maker involves aggregating individual valuations*. The advisor is saying that, in the balance between winners and losers, it is better for society to pursue a particular policy objective. But if Robbins is correct, it is impossible to make this aggregation. He backed off from his position, but he never explained philosophically why his original position was incorrect. It was not incorrect. It is an inescapable implication of all forms of nominalism. This was as true in 1938 as it was in 1300. It is still true today. It will be true until the end of time.

G. Mathematics Offers No Epistemological Foundation

The archetype of authoritative neutral logic is mathematics. I have already mentioned Wigner's assessment. There is no way to explain how the logical coherence of mathematics is relevant to the world of nature. This is the mind/matter dualism. But there are other anomalies in the logic of mathematics. Some of these were described in a 1976 article by Vern Poythress, who earned a Ph.D. in mathematics from Harvard University, and who taught theology at Westminster Seminary in Philadelphia for four decades. The article is titled "A Biblical View of Mathematics." It appeared in *Foundations of Christian Scholarship*. He showed, first, that there is an inherent dualism within the logic of mathematics: a replay of the Parmenides/Heraclitus dualism. Second, he showed that mathematics is not neutral. Third, he showed that mathematicians do not agree on a theory of mathematics, i.e., epistemology. My point here is this: *if mathematics is not im-*

mune to the accusations of dualism, non-neutrality, and logical incoherence, then more mundane, less rigorous forms of logic are equally vulnerable.

1. Law vs. Chance

I begin with the issue of stability over time. This is the issue that Parmenides raised. We need a source of stability in our thought processes. Our logic must be stable. So must parts of the world around us. *Our truths must be universal*: in our minds and also in the world around us. But how can we prove that they are universal? Why do we believe that they are? After all, we live in a constantly changing world. That was what Heraclitus said so long ago. Poythress wrote:

> Suppose that one emphasizes the *a priori* character of mathematical knowledge. Then '2 + 2 = 4' is some kind of universal, eternal truth. But why, in that case, should two apples plus two apples usually, in experience, make four apples? Why should an admittedly contingent world offer us repeated instances of this truth, many more instances than we could expect by chance? If the external world is *purely* a chance matter, if *anything* can happen in the broadest possible sense, if the sun may not rise tomorrow, if, as a matter of fact, there may be no sun, or only a sputnik, when tomorrow comes, if there may be no tomorrow, etc., can there be any assured statement at all about apples? Why, for instance, do not apples disappear and appear randomly while we are counting them? If, on the other hand, the external world has some degree of regularity mixed in with its chance elements, why expect that regularity to coincide, in even the remotest way, with the *a priori* mathematical expectations of human minds? Such questions can be multiplied without limit. Once one has made the Cartesian separation of mind and matter, of *a priori* and *a posteriori*, one can never get them back together again (p. 169).

This is not academic quibbling. With respect to subatomic physics, there really are no known answers to these questions. There is no causation such as Newtonian physics postulates. There are only statistical patterns. Physicists find that cause and effect (unity over time) does not operate at the subatomic level in the same way that it does "up here." Causes can produce

effects over distance simultaneously in the subatomic world. Physicists have known this since the mid-1960s: Bell's theorem. You and I do not spend time thinking about Bell's theorem, but physicists do. The stable world of Newtonian physics has not been with us for many decades. We may think that it is with us, but only because we operate up here. But down there, it is long gone.

Why does Newtonian physics operate up here? Why do we think of our world in terms of the metaphor of the machine? Is the world more like a machine or like an organism? Or is it really like neither one? These are not trick questions.

2. The Myth of Neutrality

Most people think of mathematics as neutral. There is this faith in an equation: **1 + 1 = 2**. Isn't this neutral? Isn't this independent of any religious support? According to Poythress, the correct answers to these rhetorical questions are *no* and *no*. He discussed some of these issues. "So, first of all, what differences have arisen in mathematics in connection with religious belief? Differences have arisen over arithmetic truth, over standards for proof, over number- theoretic truth, over geometric truth, over truths of analysis, over mathematical existence—not to mention the long-standing epistemological disputes over the source of mathematical truth" (p. 160). What epistemological disputes is he referring to? Here are a few of them. "Mathematicians, like other scientists, have a certain confidence in their convictions. This needs to be justified. How do we come to know that 2 + 2 = 4? By internal means (*a priori*; independent of existence) or by external means (*a posteriori*; derived from experience)? Do we gain the knowledge by introspection? By reminiscence (Plato)? By logical argument (Russell)? Or do we gain it by repeated experience of two apples and two apples (John S. Mill)? Or some combination of these? Or is '2 + 2 = 4' not real 'knowledge' at all, but simply a linguistic convention about how we use '2' and '4.' (A. J. Ayer)?" (pp. 168–69)

3. The Conflicting Foundations of Humanistic Mathematics

Poythress described something that most people are unaware of. Mathematicians do not agree on what the foundation of mathematics is. Most people presume that there is agreement. Here is philosophical reality.

> The philosophers of mathematics in the past have tried in turn to reduce mathematics to (a) linguistics ("mathematics is the science of formal languages"— the formalists), (b) to psychology ("mathematics is the study of mental mathematical constructions"—the intuitionists), (c) to logic ("mathematics is a branch of logic"—the logicists), (d) to physics ("mathematics is generalized from since experience"—the empiricists), (e) to sociology ("mathematics is a group of socially useful statements"—the pragmatists). The form of the supposed reduction of mathematics thus gives us a rough and ready catalog of the major schools of the philosophy of mathematics.
>
> As we might expect, such attempted reductions never really succeed. At some point, they do not do justice to the distinctive character of mathematical truth, as over against physical, linguistic, psychological truth. . . . They each refute the others, by showing up a side of the picture that the others have not sufficiently acknowledged (pp. 174–75).

If there is no agreement among mathematicians about the nature of mathematics, then why should we expect that there would be agreement among other schools of philosophy? There is no agreement. There is only agreement on this: God did not create the universe out of nothing, and he does not providentially sustain it today.

Conclusion

A consideration of epistemology is important for Christians primarily to give them confidence in their worldview (covenantal) and also their assessment of the world around them. Covenant-breakers are confident about their rejection of the epistemological relevance of the God of the Bible and the authority of the Bible. They they presume that their understanding of their own logic and also their understanding of the relationship of their logic to the changing world around them are reliable. They are confident that the world cannot be what the Bible says it is. Therefore, they presume that they do not have to go to the Bible in search of permanent principles of interpretation that will govern both their imputation of economic value and their understanding of the world around them. They presume that they can

safely rely on their own good judgment.

Point four of the biblical covenant is about *judgment*. It is therefore about *imputation*: imputing meaning and also imputing economic value. It is about evaluating the world around us in terms of fixed principles: moral, judicial, ethical, and epistemological. The covenant-breaker presupposes that his logic is correct, and he also presupposes that it correctly assesses the world around him. These are his presuppositions, usually unstated and never defended publicly. They are not the product of his careful research into the issues of epistemology. He cannot show how or why his logic is consistent over time, but he presumes that it is. He cannot show how or why his logic connects closely to patterns in the world around him. He also cannot explain the patterns. That was Wigner's point about the relationship between mathematics and physics. This connection is an unreasonable assumption, yet it works. He called this a miracle. It is not a miracle. It is covenantal.

Mises raised this same question with respect to economic logic and the external world. In a 1951 lecture, "Acting Man and Economics," he raised the issue of the logic/reality connection.

> The way in which economic knowledge, economic theory, and so on relate to economic history and everyday life is the same as the relation of logic and mathematics to our grasp of the natural sciences. Therefore, we can eliminate this anti-egoism and accept the fact that the teachings of economic theory are derived from reason. Logic and mathematics are derived in a similar way from reason; there is no such thing as experiment and laboratory research in the field of mathematics. According to one mathematician, the only equipment a mathematician needs is a pencil, a piece of paper, and a wastebasket—his tools are mental.
>
> But, we may ask, how is it possible for mathematics, which is something developed purely from the human mind without reference to the external world and reality, to be used for a grasp of the physical universe that exists and operates outside of our mind? Answers to this question have been offered by the French mathematician Henri Poincaré [1854–1912] and physicist Albert Einstein [1879–1955]. Economists can ask the same question about economics. How is it possible that something developed

> exclusively from our own reason, from our own mind, while sitting in an armchair, can be used for a grasp of what is taking place on the market and in the world?

He asked: "How is it possible that something developed exclusively from our own reason, from our own mind, while sitting in an armchair, can be used for a grasp of what is taking place on the market and in the world?" He refused to answer his own penetrating question. He referred to a pair of mathematical experts, but he did not explain here or anywhere else what they said or how they solved this crucial epistemological problem. He invoked reason. Invoking the word "reason" is not an explanation. Wigner invoked the word "miracle" rather than offer an explanation. Wigner was closer to the truth on this point than Mises was, but they both missed the point. The point is this: *the connection is covenantal*. We live in a providential world. A sovereign God has provided man, who is made in His image, with understanding of external cause and effect.

As a Christian, you must use your God-given logic and your God-given power of observation to make judgments regarding the world. This is your covenantal assignment. Remember: Adam had to name the animals of the garden before he was given Eve (Genesis 2:19–22). *Work is basic to your covenantal life*. You may also choose to accept an additional assignment: to become a scholar. This will mean added work and added responsibility. There may be no earthly rewards. Count the cost. But also count the benefits.

I end with this observation by Van Til in his book, *An Introduction to Systematic Theology* (1961). "The gift of logical reason was given by God to man in order that he might order the revelation of God for himself. It was not given [to] him that he might by means of it will legislate as to what is possible and what is actual. When man makes a 'system' for himself of the content of revelation given him in Scripture, this system is subject to, not independent of, Scripture. Thus the idea of system employed by the Christian is quite different from the idea of system as employed in modern philosophy" (p. 256). If you are interested in investigating this issue in greater detail, I recommend his book, *A Survey of Christian Epistemology*. If you read this book and Greg Bahnsen's book, *Van Til's Apologetics: Readings and Analysis* (1998), you will be in a good position to assess the implicit presuppositions by academic economists, which are usually devoid of any pretense of proof, regarding the intellectual foundations of economic theory.

Very few economists have read even one book on epistemology. They have not read Kant's major works, *Critique of Pure Reason* and *Critique of Practical Reason*. They have not thought about what Kant wrote about the connections between man's logic and the external realm beyond logic. They have also not thought about how and why what Kant taught has affected what they believe about economic logic and its connection with economic causality. *When it comes to epistemology, they are faking it.* They are presuming what they need to prove. They are not even self-conscious about their presuppositions. They may occasionally say to themselves, "Everyone knows this." But not everyone knows it. Some of us emphatically reject it.

Mammon is not God. Mammon's epistemology is not reliable. A word to the wise is sufficient.

5

TEMPORAL LIMITS TO GROWTH

Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For "he has put everything under his feet." But when it says "he has put everything," it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all (I Corinthians 15:24–28).

Analysis

This passage makes it clear that the universe does not have 2.8 billion years to go, a low estimate, let alone 10 followed by 100 zeroes, which is the high-end estimate these days. It asserts that the universe will not slowly wind down. There will be no heat death of the universe. In contrast is the eschatology of modern humanism. The frozen wastes of the lifeless, timeless cosmos is the humanists' alternative to the fiery sanction of the eternal lake of fire (Revelation 20:14–15). Grim as the heat death of the universe may be, it is far more comforting to a covnant-breaker than the thought of the eternal lake of fire. I discuss this eschatology in Appendix B. It is not the eschatology of the Bible.

The eschatology of the Bible has to do with history. Specifically, it has to do with the extension of the kingdom of God in history. There is a temporal limit to the extension of the kingdom of God. Paul described it in this passage. It has to do with the reign of Christ in history. There is a debate among premillennialists, amillennialists, and postmillennialists regarding whether Christ will be bodily present in the final thousand years of history in order to extend His reign. Premillennialists insist that He will be. Amillennialists and postmillennialists deny this. Here is the Bible's cosmology: *his-*

tory will play out when the kingdom of God in history has played out. It will have fulfilled its purpose.

Here is what Jesus said about the era of sin-burdened history. It will involve uninterrupted kingdom competition between covenant-breakers and covenant-keepers.

> Jesus presented another parable to them. He said, "The kingdom of heaven is like a man who sowed good seed in his field. But while people slept, his enemy came and also sowed weeds among the wheat and then went away. When the blades sprouted and then produced their crop, then the weeds appeared also. The servants of the landowner came and said to him, 'Sir, did you not sow good seed in your field? How does it now have weeds?' He said to them, 'An enemy has done this.' The servants said to him, 'So do you want us to go and pull them out?' The landowner said, 'No. Because while you are pulling out the weeds, you might uproot the wheat with them. Let both grow together until the harvest. At the time of the harvest I will say to the reapers, "First pull out the weeds and tie them in bundles to burn them, but gather the wheat into my barn"' (Matthew 13:24–30).

This parable confused the disciples. They asked Jesus to explain it. He did so.

> Jesus answered and said, "He who sows the good seed is the Son of Man. The field is the world; and the good seed, these are the sons of the kingdom. The weeds are the sons of the evil one, and the enemy who sowed them is the devil. The harvest is the end of the age, and the reapers are angels. Therefore, as the weeds are gathered up and burned with fire, so will it be at the end of the age. The Son of Man will send out his angels, and they will gather out of his kingdom all the things that cause sin and those who commit iniquity. They will throw them into the furnace of fire, where there will be weeping and grinding of teeth. Then will the righteous people shine like the sun in the kingdom of their Father. He who has ears, let him listen (vv. 37–43).

As I have described in my analysis of this passage in Chapter 29 of my commentary on Matthew, this parable is about continuity in history. The final judgment will end history. It will also end the competition between the kingdom of God and the kingdom of mammon. This competition is a zero-sum competition. With respect to all those who are brought by God's grace into the kingdom of God, each person is taken out of the kingdom of mammon.

This does not mean that economic growth is a zero-sum competition. It is not. Laborers in both camps can and do increase their productivity. Common grace is given to covenant-breakers so that they may become more fruitful in history. But it is clear from Paul's language that the economic inheritance is transferred to Christ at the end of time. He is the Son. He is heir to the promise. Those who are part of His kingdom will also inherit as members of His church, which is His bride. I explain this in Chapter 48, "Bride Price."

What about in between now and then? Here is what the Psalmist wrote: "Do not be angry and frustrated. Do not worry. This only makes trouble. Evildoers will be cut off, but those who wait for the Lord will inherit the land. In a little while the evil man will disappear; you will look at his place, but he will be gone. But the meek will inherit the land and will delight in great prosperity" (Psalm 37:8–11). Here is what Jesus said: "Blessed are the meek, for they will inherit the earth" (Matthew 5:5). [North, *Matthew*, ch. 4]

It is clear from these passages that there is a fundamental limit to growth: time. We live in a cursed finite world. There has been a major debate since the 1960s regarding the limits to economic growth. Critics of the free market argued that the primary limits to growth are natural resources, which include unpolluted air unpolluted water. Another limit that humanists have pointed to is the limit of space for human beings to occupy. Statistically, it is impossible to have uninterrupted growth of population at any percent above zero. The compounding effect inevitably becomes exponential. The vast increase of population since 1800 has dwarfed all previous increases. But so has the increase in per capita economic growth. So, the question arises, what is the most fundamental limit to growth? Is it time? Is it population? Is it natural resources?

A. Natural Resources

Various humanist economists have argued that the primary limits to

growth is natural resources. This became a public debate in the second half of the 1960s. Critics of the seemingly uninterrupted economic growth of the free market, especially in the United States, argued that the world would soon run out of natural resources. One of the early books that argue this way was written by an environmentalist-economist, Barbara Ward: *Spaceship Earth* (1968). She argued that the earth is like a spaceship, and therefore it needs a commander. The commander should be a central planning agency for the whole world. A much more popular book was titled *The Limits to Growth* (1972). The authors were MIT economists. They tried to persuade readers that unlimited economic growth is impossible. We will run out of resources. The problem with this argument is easy to state: the primary economic resource is human creativity. This was the argument of free market economist Julian Simon in his book, *The Ultimate Resource* (1981). If human ingenuity can find ways of maintaining output or even increasing it with a reduced quantity of resources, the limits to growth become indeterminate. On the one hand, if we are talking about increasing the quantity of resources in order to increase economic well-being, then there will be limits to growth and put an end of the process. On the other hand, if the basis of economic expansion is a reduction in the quantity of raw materials used up in the production process, then economic growth can continue until innovation and cost-cutting reach limits. We do not know what these limits are. There is no way that we could know this. The decisive characteristic of discovery and innovation is that most people do not see them coming.

The Bible teaches that the ground has been cursed. Adam's body was cursed. So, our bodies are cursed. But this does not mean that there cannot be discoveries that reduce the level of the curse on our bodies. We have made these discoveries over the past century. The Bible teaches that a major extension of life lies ahead. Isaiah wrote: "For see, I am about to create new heavens and a new earth; and the former things will not be remembered or be brought to mind. But you will be glad and rejoice forever in what I am about to create. See, I am about to create Jerusalem as a joy, and her people as a delight. I will rejoice over Jerusalem and be glad over my people; weeping and cries of distress will no longer be heard in her. Never again will an infant live there only a few days; nor will an old man die before his time. One who dies at one hundred years old will be considered a young person. Anyone who fails to reach the age of one hundred years old will be consid-

ered cursed" (Isaiah 65:17–20). This is literal. It has yet to be fulfilled. [North, *Prophets*, ch. 15]

There is nothing in nature that would limit pro-growth discoveries. We do not need to cultivate more land if we can steadily increase the productivity of the land already under cultivation. This is taking place in the United States, according to a 2015 study by Jesse Ausubel, "The Return of Nature: How Technology Liberates the Environment." It may be possible to use hydroponics to turn urban real estate into gardens if the price of food rises. This is being done on a small scale around the world. In short, *the main limit to growth is a lack of specific knowledge*.

We are seeing an exponential reduction in the cost of information by means of computer technology. This reduction in cost should lead to discoveries that enable us to reduce our costs of production of physical goods. In any case, it is plausible. At the end of the 1970s, the microcomputer revolution had begun. It became increasingly clear that the crucial economic resource is accurate information, not physical resources. The decline in the cost information became exponential. This is became known as Moore's Law, which applies to the number of transistors on a silicon chip, but the phenomenon has been going on at an increasing rate ever since the invention of the commercial telegraph in 1844. In the days of Jesus, the speed of information transfer was about one mile per hour. It was a little over this in 1820. The railroad increased this speed to a maximum of 60 miles per hour over short distancess in the early 1830s. After 1844, it was 186,000 miles a second, minus the time it took for the telegraphy and the time it took for a runner to deliver it.

With the abandonment of economic Communism in mainland China, beginning in 1979, Chinese economic growth began to expand at a rate never seen in history. No large nation has ever experienced anything like this rate of economic growth. The abandonment of Communism by the Soviet Union in December 1991 launched a comparable economic transformation in Russia. Free market ideas spread into politics. Since then, most of the world has risen out of abject poverty. It turns out that the crucial resource was freedom, not physical resources.

Resources are scarce, but human ingenuity seems to be able to work around these limits. With better knowledge, more capital, and more efficient production methods, the world has escaped the predictions of the pessimists who believed that the world was running out of natural resources. In any case, if demand rises for a resource, and output remains the same, its

price will rise. Entrepreneurs will start looking for new supplies of it, or ways to produce it less expensively, or substitutes. There will be price signals before supplies run out.

There is no question that a rate of population growth of 2% per annum would transform today's 7.5 billion people into 50 billion people in a century, and three trillion people in three centuries. There is no way that this is going to happen. The rate of population growth is going to slow. It has slowed down all over the world over the last half-century.

God's command to Adam and Eve to be fruitful and multiply will no longer apply, once mankind has established dominion across the face of the earth. At the present rate of population growth, this will not be much longer. Then dominion will become more obviously a covenantal process rather than a biological process. It will become more obviously a competition between the kingdom of God and the kingdom of mammon.

B. Evolution vs. Replacement

One of the themes of science fiction is this: a future fusion between computers and humanity. This fusion will produce an evolutionary leap of being. This was the theme of a popular movie in 1979, *Star Trek: The Motion Picture*. In the movie, this evolution was presented in an optimistic fashion: a sign of progress. A rival vision, quite pessimistic, is this: digital technologies will lead to computers that control the world or robots that control the world. This theme goes back to a letter to the editor written by New Zealander Samuel Butler in 1863: "Darwin Among the Machines." He wrote this:

> The views of machinery which we are thus feebly indicating will suggest the solution of one of the greatest and most mysterious questions of the day. We refer to the question: What sort of creature man's next successor in the supremacy of the earth is likely to be. We have often heard this debated; but it appears to us that we are ourselves creating our own successors; we are daily adding to the beauty and delicacy of their physical organisation; we are daily giving them greater power and supplying by all sorts of ingenious contrivances that self-regulating, self-acting power which will be to them what intellect has been to the human race. In the course of ages we shall find ourselves the inferior race. Inferior in power, inferior in that moral quality of self-control, we

> shall look up to them as the acme of all that the best and wisest man can ever dare to aim at. No evil passions, no jealousy, no avarice, no impure desires will disturb the serene might of those glorious creatures. Sin, shame, and sorrow will have no place among them. Their minds will be in a state of perpetual calm, the contentment of a spirit that knows no wants, is disturbed by no regrets. Ambition will never torture them. Ingratitude will never cause them the uneasiness of a moment.

He then wrote a popular utopian novel, *Erewhon* (1872), which extended this theme in three of the novel's chapters: "The Book of the Machines."

As Moore's Law has extended into more and more areas of life, the fear that Butler articulated in 1863 has begun to spread among the world's scientific and literary figures. This dystopian scenario is becoming increasingly prominent. No one has any real-world suggestions about what to do about it. Technological development is highly decentralized. It is growing rapidly. It is extending its influence into more areas of life. As its price falls, more is demanded. Those who defend the free market tend to shrug off the threat. "Let the market decide." Those who still have some faith in central planning see little hope because there is no worldwide government with sufficient power to direct technological development by the threat of sanctions. The invasion of the algorithms is taking place at a rapid rate. The key question is this: "Will this rate of digital innovation become exponential?" At present, this seems likely.

This is no laughing matter anymore. This is no longer simply a theme of science fiction authors. As the cultural extension of algorithms and robotics continues, humanists will have to face the implications of their theory of evolution. It is quite possible, *given humanism's presuppositions*, that digital evolution may replace man's biological evolution. Not only is it possible, it now seems likely to some humanists. Digital evolution progresses by several percentage points per annum. Human biological evolution supposedly develops only over tens of thousands of years. Digital evolution is about to become exponential today. Biological evolution supposedly has not made a leap forward in about 150,000 years. What could reverse digital evolution? Nothing seems likely at this point.

C. A Theological Debate

Man is made in the image of God. This image is personal. We live in a world of cosmic personalism. This is an inescapable implication of the Bible's doctrine of creation. This means that life is not digital. It is biological. Man has been given dominion over all life forms.

Biblically speaking, it is impossible for machinery to evolve into life forms. The answer to Butler's letter to the editor is simple: *machines are not guilty because machines are not alive*. Machines are not responsible because machines are not alive. He predicted this: "Sin, shame, and sorrow will have no place among them." This is true because the following is *not* true: "Their minds will be in a state of perpetual calm, the contentment of a spirit that knows no wants, is disturbed by no regrets." They will have no minds.

If man is not made in the image of God, then Butler's vision is not only likely, it seems inevitable. If life is as much digital as analogical, then the evolution of digital life forms is virtually guaranteed. Their triumph over humanity is also guaranteed. Digital progress is so rapid; biological evolution is so slow. This assumes that there is such a thing as biological evolution. Humanists insist that there is. They insist that it is the dominant aspect of the development of life. Only with the evolution of man did biological evolution get replaced by cultural evolution, according to the humanists' scenario. But now cultural evolution has led to digital evolution, and digital evolution seems about to become exponential. It is uncontrolled by any central planning agency. It now seems uncontrollable by any force except for unprofitability in the free market. Digitalization seems increasingly profitable to developers and users.

These are deeply theological questions. The theology of humanism places man at the pinnacle of the known universe. But this is true only because of evolution: biological and cultural. Now man faces competition with impersonal forces of digital evolution. It is not clear to humanistic social theorists how man can win this competition. They do not accept the Christian answer. Actually, there have been two Christian answers. One is that biological evolution has been directed by God. Another is that there has been no such thing as biological evolution. Both versions insist that there is a God, He is sovereign, and He does direct the affairs of mankind. The evolutionist has no god to appeal to for deliverance. His only god is *god by default*: mankind. Mankind has now created a scenario in which he seems

likely to be dethroned unless the Christian view of man as made in the image of God is correct.

The main arena of this theological confrontation is economics. The invasion of the algorithms and the robots is taking place because of economic factors. The algorithms and the robots cost less to implement in certain areas of the economy than it costs to hire labor. As the costs of the algorithms and the robots decline, the replacement of repetitive human labor is going to accelerate. Another potentially crucial arena of confrontation is military. Digital developments in warfare are potentially life-and-death developments. But the driving force of the digitalization of life is economic, not military.

This is another reason why Christian economics offers a far more comforting scenario than humanistic economics does. Humanistic economics rejects the doctrine of creation and the doctrine of providence. In doing so, it leaves man alone in the universe. But now, thanks to digital advances, man may not be alone for much longer. There is, in the vernacular, a new sheriff in town. Christian theology denies this. Christian economics denies this. But Christian theology and Christian economics are not acceptable to humanists in general and humanistic economists specifically.

D. Time

Of all of the limits to growth, time is the one that humanists do not regard as a threat. They have a vision of something approaching unlimited time. The heat death of the universe may be as close as 2.8 billion years, a but they really do not worry about this. They see mankind's evolutionary process in terms of tens of thousands of years. The possibility of an imminent end to time is low on their priorities. It could come through a devastating nuclear war, but even in a war, there would be millions of survivors outside the war zones. So, humanists focus on limits imposed by depleted natural resources, low-cost living space for mankind, and the possible replacement of mankind by robots.

For those people who hold to the six-day creation, time is the obvious limit to growth. They see mankind's future in terms of as few as a thousand years, and probably no more than a few thousand years. "Here today. Gone the day after tomorrow." As the acceleration of economic development continues, they become more aware of the temporal limits to growth. They are not afraid of these limits. On the contrary, they rejoice in them. They imply a temporal limit on the reign of sin. For those Christians who believe that

sin will not be steadily rolled back through a worldwide revival, meaning amillennialists, their motto is this: "the sooner the end of history comes, the better." Premillennialists believe that Christ will return to set up an earthly kingdom, meaning an enormous judicial hierarchy. They are unconcerned about issues of economic theory, political theory, and other matters that pertain to a world without the Son of God as the final court of appeal, possibly with the Supreme Court set up in Jerusalem. They do not talk about Exodus 18, in which Moses was being worn out by the long lines of people seeking justice. That was in a society with a total population of about 2.4 million people. Think of the length of the lines in a population of nine billion people. However swift that justice will be at the top, it will not be swift enough to get those lines shorter. Jesus will have to delegate a great deal of authority to his subordinates. That was the advice that Jethro gave to Moses, and it was good advice. [North, *Exodus*, ch. 19]

It is obvious that the world will soon be filled to its capacity with people if the rate of population growth does not slow. It is safe to say that it will slow. Even with a rate of population growth of under 1% per annum, it will not take a thousand years to fill the earth to its support capacity. So, the correct focus of interest has to be on changes wrought by technologies, especially digital technologies. These are the proper hope for avoiding food shortages, fresh water shortages, pollution problems, and other resource shortages that will inevitably come as a result of bringing subsistence farmers in small villages into the world economy by way of the World Wide Web and low-cost smartphones. By the middle of the twenty-first century, there will be no more life-threatening poverty anywhere in the world. This has never happened in recorded history. Social institutions have not adjusted yet to this revolutionary transformation. But they will. They always do.

The biggest social change will be life extension. When this takes place, it will affect almost all human relationships. There are futurists who are highly optimistic about a major breakthrough in this area. The problem is, nobody has a cogent idea of what to do if retired people live for an extra three decades or five decades. Obviously, all of the government-funded retirement programs will be revised. But it will not take an increase in life expectancy to achieve this. The unfunded liabilities of existing old-age health care programs are already in the hundreds of trillions of dollars in the United States. People who want to work longer, or are forced to work longer by economic necessity, are going to be facing a market in which algorithms and robotics are taking

away jobs requiring simple repetitive labor. They may be taking away jobs that require fairly complex repetitive intellectual labor. No one has a solution for this yet. The issue of employment is going to be the most pressing social issue in the second half of the twenty-first century, and possibly sooner.

This is why the issue of the calling is going to become more important. If people can earn most of what they need to live comfortably, what are they going to do with their spare time? Even if people have to work long hours in face-to-face service jobs to earn a living, they will still have to decide what their callings are. Will their callings be their face-to-face jobs? Will their callings be whatever it takes to earn a living? This was what the calling was for the vast majority of humans up until the Industrial Revolution. We are going to have to rediscover what was lost. When men had few alternatives for employment, their jobs were their callings. The most important thing they could do in which they would be most difficult to replace was their job. If they were the heads of households, they had to keep their jobs, which were mostly agricultural jobs. These were low division of labor jobs. What we will be facing soon is a society in which people will have to have flexible jobs that involve a high level of creativity, meaning a level of creativity not provided by an algorithm. But most people in history have not demonstrated a capacity for such creativity. What will most people do to earn a living? We will have to find out, and do so fairly soon. As Paul wrote, we see in a mirror darkly (I Corinthians 13:12). The mirror tells us a little about the past. We cannot see the future well.

Conclusion

In 1975, the pressing climatic issue among well-educated intellectuals was supposedly a coming ice age. The pressing economic issue was supposedly widespread starvation by the year 2000. (*The Population Bomb*, 1968; "The Tragedy of the Commons," 1968). The long-term economic problem was supposedly a shortage of raw materials, including a shortage of low-pollution environments. Also on the list was excessive population growth. Today, the pressing climatic issue among well-educated intellectuals is climate change, by which they mean global warming. The pressing economic issue is inequality. Yet there is little evidence that economic inequality is much greater today than it was in the late 1890s, when the Italian economist Vilfredo Pareto discovered that about 20% of Western Europe's citizens owned about 80% of the wealth. The great unknown today is the pace

of the invasion into the labor markets by algorithms and robots. What will this do to unemployment rates? What will this do to the kinds of jobs available? Concerns about pollution have diminished due to successful anti-pollution policies. Concerns about population growth are diminishing due to falling birth rates.

Why do I mention these chronologically narrow concerns in a general treatise? Because every generation needs to be reminded that the concerns of its generation will probably not be the concerns of the next generation and certainly not three generations down the line. (I am not talking about the three generations between John Tyler and his two grandsons: from 1790 until at least 2020.) No matter how sophisticated our data-collection techniques are, and no matter how sophisticated our computer-generated projections are, we scarcely know what is coming two decades away, except in the area of demographics. No one in 1990 recognized what Tim Berners-Lee had done when he posted the first World Wide Web website. A decade later, worldwide communications had begun to change. Less than two decades later, most of what had seemed revolutionary in 2000 seems archaic. Yet most people in 2020 have never heard of Tim Berners-Lee.

I end this chapter with a quotation from an article written by my mentor, Robert Nisbet. It was published in 1968 in *Commentary*: "The Year 2000 and All That." It is as relevant today as it was then. It will be as relevant in a century as it is today. The article was a survey of general predictions about the future since the French Revolution (1790). He ended with this assessment. "It is very different with studies of change in human society. Here the Random Event, the Maniac, the Prophet, and the Genius have to be reckoned with. We have absolutely no way of escaping them. The future-predictors don't suggest that we can avoid or escape them—or ever be able to predict or forecast them. What the future-predictors, the change-analysts, and trend-tenders say in effect is that with the aid of institute resources, computers, linear programming, etc. they will deal with the kinds of change that are not the consequence of the Random Event, the Genius, the Maniac, and the Prophet. To which I can only say: there really aren't any; not any worth looking at anyhow."

CONCLUSION TO PART 1

Now the serpent was more shrewd than any other beast of the field which the Lord God had made. He said to the woman, "Has God really said, 'You must not eat from any tree of the garden'?" (Genesis 3:1)

You have read more pages on epistemology in this book than you are likely ever to read again in any academic study, unless you decide to study philosophy. What I have done here is simply not done, and has never been done, in the history of economic thought. I am unaware of another book in any academic discipline, other than philosophy, that begins with such a detailed presentation of the underlying presuppositions of the field. Silence prevails.

There is a reason for this silence. Academia has been humanistic ever since the days of classical Greek philosophy. It has rested on an unstated presupposition: the autonomous mind of man has both the authority and the ability to interpret the world correctly apart from any appeal to the supernatural. This is the meaning of autonomy. Humanists have long waged an intellectual war against supernaturalism in general and biblical religion in particular. This has been going on ever since the serpent asked Satan's rhetorical question: "Has God really said?" The correct answer is this: *God has clearly said*.

Part 1 is a survey of epistemology: "What can man know, and how can he know it?" This topic is unfamiliar to most university students. It is unfamiliar to most university professors. It has never been a popular topic. My objective for Part 1 was to help prepare you for a lifelong intellectual battle. Humanists dismiss Christianity as wrong—theologically, morally, and epistemologically. They dismiss the Bible as a book of myths. Modern institutional education is based on this premise: *the Bible is not an intellectually binding source of intellectual authority*. Part 1 is a short survey of the problems facing humanists in explaining the intellectual system that they use to dismiss Christianity. I want you to understand that the self-confidence of

humanists is not based on a coherent explanation of how men can reason apart from (1) relying on the God of the Bible to provide coherence (providence), and (2) relying on the Bible to provide guidelines for ethics and a correct understanding of historical causation, which is ethics-based. Humanism is grounded mainly on the dualist philosophy of Immanuel Kant: trapped in between his irrational noumenal realm of powerless freedom and his scientific phenomenal realm of unbreakable mechanical causation, each of which is created by the mind of autonomous man.

A. Kant's Legacy

Kant offered no scientific or logical way to explain how the mind of man gains access to the external world's laws of causation. It does, obviously, but Kant could not explain why or how. He did not believe that these laws exist independently of the mind of man. Michela Massimi, an expert on Kant, wrote "Kant and the Laws of Nature" for *Oxford Bibliographies* in 2016. His view is representative of most experts in Kant's thought. "When it comes to theoretical philosophy (and in particular, to Kant's philosophy of nature, which is our topic), the main question is how it is possible for us to come to know nature as *ordered* and *lawful*. Where does the lawfulness of nature come from? In the *Critique of Pure Reason* and in the *Prolegomena*, Kant held the view that our faculty of understanding is the primary source of nature's lawfulness because the a priori categories of the understanding 'prescribe laws to nature'—that is, they play the role of constitutive a priori principles for our experience of nature."

Yes, you read that correctly. Strip out the academic jargon —"constitutive a priori principles"—and the paragraph really is as nutty as it sounds. Massimi is arguing that Kant believed that man's mind (whose, exactly?) imputes coherence to nature. Man's mental categories are the only source of nature's coherence as far as we can ever know. Let me boil this down in three words: *man is God*. Man's subjective imputation of coherence to nature is definitive and binding on nature. Whether the universe is inherently coherent or not, a question that Kant dismissed as unanswerable, man's subjective imputation provides order to the universe. Kant's lengthy and highly detailed arguments for this bizarre conclusion do not bother Kantian philosophers. They would bother anyone with a trace of common sense, assuming that people with common sense would bother to read Kant's two unreadable major books: *Critique of Pure Reason* (1781) and *Critique of*

Practical Reason (1788), which is as impractical a book as you will ever not read. I assure you, economists have more common sense than to read these books. They have their profession's unreadable journal articles to read (which few do) and write (which even fewer do).

The modern intellectual world unknowingly relies on Kant's epistemology, yet almost no scholars other than trained philosophers have ever read Kant. They are naive and uninformed about the major epistemological questions Kant raised but failed to answer. They do not understand that the epistemological foundation they stand on is sand. This is not where you stand. "Therefore, everyone who hears my words and obeys them will be like a wise man who built his house upon a rock. The rain came down, the floods came, and the winds blew and beat upon that house, but it did not fall down, for it was built on the rock. But everyone who hears my words and does not obey them will be like a foolish man who built his house upon the sand. The rain came down, the floods came, and the winds blew and struck that house, and it fell, and its destruction was complete" (Matthew 7:24–27).

This is why Christian scholars should not enter the world of scholarship with a paralyzing sense of inferiority to humanists. On the contrary; they should be confident. I want you to believe two things with respect to economic theory. First, you should be confident in the Bible. Second, you should be confident that humanists have not offered a logically consistent intellectual foundation to explain economic causation or any other kind of causation.

B. Self-Interested Economists

Full-time scholars believe in the autonomy of man, the autonomy of philosophy, and the autonomy of specific academic disciplines. Yet they also want financial support from the public: dependence, not autonomy. They are well aware that most of what they say and do is not marketable in the great auction that is the free market. There are few bids for their services. So, they are forced to ask for donations. They learned in the late eighteenth century in what is now Germany that there is far more money available through state compulsion than from voluntary donations. What they have demanded ever since is autonomy from interference by the public ("academic freedom"), but also compulsory economic support from the public ("investment in our future"). *They want the benefits of economic dependence without the liability of intellectual subordination*. This outlook goes back to

Adam in the garden. The serpent implicitly promised this: the benefit of being God, knowing good and evil, but without the liability of judicial subordination to God. In an old English phrase, this irreconcilable pair of goals are described as having your cake and eating it, too.

Academia today is funded massively by the state. This money is extracted from taxpayers by means of the threat of violence. Most taxpayers do not share the view of the humanists that there is no God who speaks authoritatively in history. Professors are using the state to steal from taxpayers. They justify this theft in the name of the myth of intellectual neutrality, which is another way of asserting the autonomy of man. The Bible makes it clear that there is no autonomy. There is also no neutrality. It is deceptive to argue for either position. It is also highly self-interested.

Economics is the academic discipline whose members are most aware of the effects of self-interested behavior. The entire discipline has rested on the principle of personal self-interest ever since the days of Adam Smith. In no other academic discipline have the practitioners been more adamant in asserting the ethical neutrality of their field. This goes back to the mercantilists a century before Smith. Academics insist that there is no theft involved in compelling taxpayers to fund them. Here is their logic: advances in ethically neutral economic theory benefit everyone. To say that they are ethically blind to their intellectual justification of their self-interest is an understatement. In short, *they respond predictably*, just as economic theory says people do.

C. The Five Fundamental Principles of Economic Theory

I have structured Part 1 in terms of the biblical social covenant's five points: sovereignty, authority, law, sanctions, and time. Economic theory is a subset of this structure.

1. Point one: Sovereignty

Point one of the biblical covenant is the sovereignty of God. He is transcendent. Sovereignty in philosophy is always the foundation of all thought. It is the starting point of philosophy. *This is the central presupposition in human thought.* Humanists have their equivalent of this presupposition. It is never stated openly by academic humanists when they write their books. They presume the sovereignty of man. I break with this tradition of convenient silence. The source of truth is God, the Bible teaches. I have made this clear at the outset. I have argued that presuppositions are the foundations of

all logical systems. The systems rest on them, yet these presuppositions are not based on logic. They are based on faith.

I introduced you to the writings of Cornelius Van Til on this point. He argued that the Creator-creature distinction must be the starting point of all Christian philosophy. I then surveyed the issue of cosmic origins and its relation to sovereignty in economic theory. Economists are Darwinists. Nevertheless, with the exception of Nicholas Georgescu-Roegen, economists have avoided the topic of cosmology. I made it clear why I reject the humanists' doctrine of neutral scholarship. It rests on non-neutral presuppositions.

Humanists use a two-step argument to get to their fundamental principle: the sovereignty of man. First, they begin with the autonomy of the cosmos, which is impersonal and without purpose. Through the interaction of impersonal and purposeless random change and impersonal physical, chemical, and biological laws, man evolved. Second, man has purposes. This makes man personal. Man is now in charge of the nature. He answers to no higher authority. Point two of the biblical covenant, hierarchical authority, becomes point one in the humnanists' covenantal structure: sovereignty. I discussed this subtle argument in Appendix A of my economic commentary on Genesis: "From Cosmic Purposelessness to Humanistic Sovereignty."

The doctrine of creation is the most fundamental presupposition of Christianity. Why? Because the doctrine of the creation of the cosmos by God out of nothing is the foundation of the doctrine of God's sovereignty. Similarly, the denial of this assertion is the most fundamental presupposition of humanism. In *A Humanist Manifesto* (1933), issued by the American Humanist Association, we are presented with 15 assertions. Here are the first two.

> **FIRST**: Religious humanists regard the universe as self-existing and not created.
>
> **SECOND**: Humanism believes that man is a part of nature and that he has emerged as a result of a continuous process.

These points one and two parallel points one and two of the biblical covenant: sovereignty and authority. This doctrine of origins is a self-conscious substitution of a new concept of sovereignty—impersonal non-creation—for Christianity's concept of sovereignty: personal creation. *It substi-*

tutes cosmic impersonalism for cosmic personalism. This declaration of non-origins serves as the foundation of the sovereignty of the god of our era: mankind. *Man serves as god by default*. He possesses unchallenged authority. He is autonomous. Why? In the humanist outlook, he has purposes. Nature does not. This substitution of man's authority for God's began with the serpent's temptation: "Has God really said?" Man is not really under God. Man can exercise authority autonomously.

This self-conscious substitution of a new god for the God of Christianity is never publicly announced in the treatises and textbooks of humanists. But this substitution is fundamental to the assertion of intellectual neutrality. We have heard it before. Moses warned Israel in God's name: "But you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:17–18). *Modern economics declares that autonomous man is the source of wealth*. Man has used nature, which belonged to no one prior to man, to build civilization. There was no owner before man. Therefore, there was no sovereignty before man. Autonomous man is now at the top of the three resource chains: natural resources, knowledge, and time.

2. Points Two Through Five

Point two of the biblical covenant is authority/hierarchy. Chapter 2 is devoted to a discussion of the covenant's five points. Here, I argue that economic theory is not autonomous. Christian economic theory rests on a concept of a hierarchical order in which law is superior to economics. I argue that trusteeship, which is a legal concept, is superior to stewardship, which is economic. I present what I regard as the covenantal structure of economics in four sets of five laws each. In contrast, humanistic economists do not begin with God's covenant, which involves moral and judicial laws. They begin with the doctrine of economic scarcity. This starting point is an implicit announcement of the autonomy of economic science. Christian economics denies such autonomy.

Point three of the biblical covenant is ethics. Chapter 3 is an assertion of the value-laden nature of economics. This in an inescapable implication of the covenantal structure of economics. Man cannot escape God's economic laws, which are at bottom ethical. Economic causation is at bottom ethical

(Leviticus 26; Deuteronomy 28). Humanistic economists have sometimes been forthright in their declaration of the value-free nature of economic theory. All of them assume it. This is a declaration of scientific autonomy. It is basic to all modern science. This declaration goes back to the Greeks.

Point four of the biblical covenant is sanctions. This is a matter of exercising judgment. Judgment is the application of law to historical circumstances: casuistry. Chapter 4 deals with epistemology: "What can man know, and how can he know it?" Epistemology undergirds the question of methodology in every academic discipline. Few scholars outside of philosophy ever consider epistemology. In every discipline, only a handful bother with methodology, which is a narrow application of epistemology. I argue, following Van Til, that modern epistemology goes back to Kant. The dualisms that plagued Kant—nature/freedom, personality/science—are ignored by his disciples, who are generally unaware of these issues. Kant could not tell us how the cause-and-effect realm of nature left man free to choose. Man is said to be both outside of nature's impersonal causation (gaining freedom) and also in charge of nature (gaining power). Economists do not concern themselves with the Kantian epistemological foundations of their discipline. They remain mute.

Point five of the biblical covenant is time. This is the issue of succession over time. In economics, this is the issue of inheritance. I discuss the issue of long-term economic growth in relation to the issue of time. Most economists favor economic growth. This raises the issue of the limits to growth. This in turn raises the issue of time. *Human population cannot compound for long on earth*. The compounding process has now raised serious questions regarding resource limitations, especially living space. The steady compounding of digital technology has raised the issue of the falling cost of information: its effects on jobs. All of these growth-related issues point back to cosmic origins. The seemingly endless time frame associated with the humanists' doctrine of the Big Bang is not available if the Bible's account of time is correct. *Compound economic growth points to the fulfilling of the dominion covenant and therefore the end of time*. The humanistic economist does not consider biblical chronology: a looming final judgment. He assumes the existence of eons of time: the cosmic evolutionary time frame. But what becomes of the doctrine of compound economic growth in such a time frame? *Either growth must end or else time must end*. I argue for the latter. Economists remain silent on this issue, except for a handful of econo-

mists who advocate zero growth.

Conclusion

My main point in Part 1 is this: *humanists have not been forthright in specifying their intellectual starting points, which are based on unproven and unprovable presuppositions*. These presuppositions are not based on the rigorous logic that humanists insist is binding on scientists.

This is surely the case in economic science. I have used economists as illustrations of a universal trait among humanistic academics. *They hide their presuppositions from their readers*. I think most of them hide their presuppositions from themselves. They are not trained to think in terms of presuppositions. They presume what they need to prove, as self-proclaimed scientists, by means of their supposedly neutral logic. If they were more forthright about specifying their ultimately religious presuppositions, which are not shared by most citizens, they would reveal themselves as special pleaders for humanism. This would threaten their acceptance. This would in turn threaten their funding. They have zero self-interest in doing this. So, they remain mute. They do not discuss sovereignty, authority, law, sanctions, and time. They implicitly assume the humanist worldview's presuppositions regarding these issues, but they do not mention them, let alone defend them.

It is intellectually mandatory that Christian scholars in every academic discipline begin their treatises with a detailed discussion of these five principles as they apply to their respective disciplines. Christian scholars should become self-conscious about their disciplines' foundational principles. They should identify and then challenge the humanists' versions of these five principles in their fields.

Having discussed the five foundations of economic theory, both humanistic and Christian, I am ready to discuss the five major categories of economic theory. I cover these in Part 2.

Part 2
CATEGORIES

INTRODUCTION TO PART 2

Give to a wise person, and he will become even wiser; teach a righteous person, and he will add to his learning. The fear of the Lord is the beginning of wisdom, and the knowledge of the Holy One is understanding (Proverbs 9:9–10).

The fear of God is the beginning of wisdom. Why? Because God is the Creator, the Law-giver, and the final Judge. God is the source of providence, which sustains the cosmos. That is to say, God is sovereign.

For social theory to be accurate, it must deal forthrightly with five general categories: sovereignty, authority, law, sanctions, and time. Every social theorist must then identify the applications of these five general categories in his specialized field. If he does this, he will not overlook something crucial. He should also discuss lots of subordinate categories, but these are supplemental. They are not foundational. The five points are foundational.

Part 2 introduces the five categories of economic analysis: purpose, allocation, boundaries, imputation, and inheritance. These categories govern the whole of Christian economic theory in the period in between man's creation and the final judgment. The fifth point, inheritance, will not apply in the new heaven and new earth, in which there will be no marriage. It will be replaced by succession, which will be based on the division of labor. Succession is point five of God's overall covenant: God, man, law, sanctions, and succession.

Why are these the five crucial categories for economic theory? Why not the five categories in Part 3 of the *Student's Edition*? Part 3 of the *Student's Edition* is a call to commitment. It offers an intellectual structure for an inter-generational program of economic redemption. The categories are providence, service, leasehold, entrepreneurship, and compound growth. This is a list of themes leading to the economic redemption—buying back—of society. They are replacements for the categories that provide the intellectual structure of the long-term program of humanistic economics:

chance, autonomy, theft, bureaucracy, and disinheritance. They are needed to guide anyone who is serious about restoring the productivity of the pre-fall world that man lost, and then extending that world beyond the geographical boundaries of the garden of Eden. I used these categories to structure Volume 3: *Activist's Edition*. In contrast, Volume 4 has a different goal: the reconstruction of economic theory, meaning economic analysis, along biblical lines. I have identified and developed the categories in Part 2 as intellectual tools to provide coherence to the topics that follow Part 2.

Point one of the biblical covenant model and its applications in every field always has to do with God's sovereignty. The creation out of nothing was the manifestation in history of God's sovereignty. To begin with any other doctrine of origins is to begin with man as autonomous. Man's autonomy is where all modern humanistic sciences begin. In contrast, in every Christian science, point one is connected to God's creation of the universe.

Basic to my approach to economics is this: it is theocentric. It begins with God, not man. Specifically, it begins with the Trinity. That's why it is Christian economics. Any form of economics that does not begin with the Trinity is not Christian. That should be easy to understand. But what aspect of God should we begin with? That is the crucial question. Here is my answer. Actually, it is three answers: ownership, providence, and purpose. All three answers have to do with the same topic: the sovereignty of God.

A. Ownership: A Judicial Category

In Chapter 1 of *Student's Edition*, I argued that God's original ownership was the starting point of economic theory prior to the fall of man. This concept derives from God's creation of the world. "The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers" (Psalm 24:1–2). In Chapter 2, I argued that God's delegation of ownership to man in the dominion covenant (Genesis 1:26–28) established man's authority: stewardship. [North, *Genesis*, ch. 3] Stewardship is a matter of delegated sovereignty. This sovereignty is limited by boundaries: law, geography, and time.

God is the Owner of the universe because of two things: His original creation of the universe and His providential administration of it subsequently. The completion of the creation on day six, coupled with God's declaration of its goodness, jointly constitute the starting point of any discus-

sion of economic imputation. "God saw everything that he had made. Behold, it was very good. This was evening and morning, the sixth day" (Genesis 1:31). This verse establishes God as a uniquely transcendent God: separate from and dominant over the creation. It also identifies God as the source of all imputations of value. The doctrine of God as *sovereign Imputer* is crucial for any discussion of economic value, as we shall see.

God's ownership is absolute. Man's ownership is bounded. It is derivative. God's ownership is the initial *judicial category* in Christian economic theory. It is important for economic theory because it was point one of the biblical economic covenant in the pre-fall world. Economic theory is not autonomous, contrary to humanistic economics. It rests on a legal principle: God's original ownership. In humanistic economic theory, this foundation is unstated. Economists begin with scarcity, not ownership. They begin with an analytical category that does not seem to be either judicial or moral.

The judicial categories are superior to the economic categories. Trusteeship is superior to stewardship. This is why, in the *Student's Edition*, I began with the topic of God's original ownership in the pre-fall world. This is primarily a judicial category. It has to be the starting point of Christian economics because it is a judicial category. It is based on the biblical account of God's creation of the universe. His creation of the cosmos established His ownership of the cosmos. This is the judicial basis of God's sovereignty in history and in eternity. His sovereignty is manifested in his judicial office. Because God is the sovereign Owner, He does not have to make trade-offs in life. He does not have to give up one thing in order to gain another. This is why a non-economic category is foundational to Christian economic theory. It precedes economic theory. This is why humanistic economics is inherently incorrect. It does not start with the judicial category of God's original ownership, and it also does not start with the judicial category of man's derivative ownership. It treats economic theory as if economics were autonomous. It is not. It is derivative. It is an aspect of man's finitude. Man's finitude is grounded metaphysically in God's absolute sovereignty, which was manifested in His creation of the cosmos out of nothing. That was the ultimate manifestation of the absence of a trade-off. God got something for nothing.

God's ownership is primarily a judicial category. It provides the covenantal framework for economics. It answers the question: "Who's in charge here?" This is the covenantal issue of sovereignty. But God's ownership does

not explain the nature of human action: purposes, planning, and action. Economic theory deals with human action. Human action begins with purpose, just as God did before the creation. Christian economists should therefore discuss purpose as the key *explicitly economic* category for explaining the other four major categories: allocation, boundaries, imputation, and inheritance.

B. Providence: A Metaphysical Category

By metaphysics, I mean the underlying force and structure that hold the world together. Metaphysics is the foundation of causation: cause-and-effect.

The biblical doctrine of creation carries with it the idea of God's providence. Specifically, this providence is supplied by Jesus. Paul wrote: "In his Son we have redemption, the forgiveness of sins. The Son is the image of the invisible God. He is the firstborn of all creation. **For by him all things were created, those in the heavens and those on the earth, the visible and the invisible things**. Whether thrones or dominions or governments or authorities, all things were created by him and for him. He himself is before all things, and **in him all things hold together**" (Colossians 1:14–17).

In Chapter 11 of the *Student's Edition*, I argued that in this, the redemptive era, this focus on creation must focus on the doctrine of providence. Why? Because Christian scholars must make a self-conscious break from the epistemology of humanism, which rests on the idea of purposeless and impersonal cosmic chance and the purposeless and impersonal Big Bang.

Christian scholars must begin where the Bible begins: "In the beginning, God created the heavens and the earth" (Genesis 1:1). God's providence is the source of cosmic coherence, of causality. It provides metaphysical coherence, meaning unseen, underlying coherence. Jesus holds all things together. The doctrine of God's providence is the metaphysical foundation of Christian confidence. God does not make mistakes. Nothing surprises Him. His word can be trusted. *Providence is governed by God's purpose.* His decree is sovereign. For Christians, the doctrine of providence is supposed to produce optimism regarding history.

The Christian scholar must self-consciously challenge the humanists' category of impersonal chance as the source of the cosmos: the Big Bang. This intellectual battle should begin with the doctrine of cosmic origins. *The issue of cosmic origins is the issue of original sovereignty.* The Bible's ac-

count of God's creation of the cosmos is the foundation of Christianity's doctrine of the sovereignty of God. God's *sovereignty* is another way of saying God's *providence*: His day-by-day, moment-by-moment control over the cosmos. Social theorists usually think of sovereignty strictly as a judicial category: the original source of the law and the final court of appeal. But, with respect to the cosmos, God's sovereignty is far more than judicial. It is a cosmos-sustaining providence.

Humanists do not dwell long on the doctrine of chance. They affirm it with respect to cosmic origins, but then they move on to the evolution of man: 13.7 billion years later. They identify man as the sole source of purpose in the cosmos today as far as men know. The Big Bang and the subsequent evolutionary process prior to the unplanned appearance of man were purposeless, they assert. Humanism invokes the Big Bang as a way to sever any connection between God and man. Humanists assert that the Big Bang was purposeless. It was also impersonal. They do this as part of a grand intellectual strategy: *to make autonomous man the operational sovereign.* They do this by means of a four-step argument, which they refuse to spell out in one place for the public to evaluate. Nevertheless, they believe it. First, the impersonal, purposeless cosmos somehow produced life about 3.5 billion years ago. Life is fundamentally different from inanimate nature. Some animals have purposes. They actively shape their immediate environments. Second, the still-impersonal, purposeless process of biological evolution produced man, a unique species. This was about three million years ago. Third, man is unique in the animal kingdom because he has purposes with respect to altering his regional environment, not just altering his immediate environment. More important, mankind evolves culturally by transmitting an intellectual heritage by words and symbols. Fourth, mankind's all-encompassing purposes have placed collective man on the throne: sovereignty. *The existence of purposes beyond the individual animal's goal of survival is the biological basis of man's claim to sovereignty.* I call this argument "from cosmic purposelessness to humanistic sovereignty." This is the title of Appendix A of my economic commentary on Genesis, *Sovereignty and Dominion*.

In the Darwinian worldview, purpose arrived in the universe only with advanced forms of life. Life arose out of purposeless change. As far as Darwinists know, man alone has long-run purposes, which can be achieved only by complex planning. For the Darwinist, purpose was a great cosmic

discontinuity in an autonomous universe. For the Christian, the creation of the universe was a great discontinuity, one which was completely separate from the autonomous Creator. Purpose is eternal. The universe is not. The universe is now without end, but it had a beginning not too long ago. *God's purpose is therefore more fundamental than the universe*. It precedes action because it preceded the creation.

Man's purposes rest on God's providence. Everything rests on His providence. Without providence, the coherence of the universe and man's share of it could not be sustained. *Providence is the general category for all science*. It is an aspect of God's creation. God did not create the universe and then depart. The biblical doctrine of God insists that He is transcendent but also present with His creation. He progressively governs the earth primarily through man. This is the meaning of the dominion covenant.

With respect to developing Christianity's worldview, the biblical doctrine of providence is crucial. Humanists recognize this. They deny providence with respect to origins. Christian social theorists should therefore begin with God's creation of the world out of nothing. This declaration identifies God as sovereign. It declares that the cosmos is personal. This breaks with humanism at the most fundamental level.

Providence refers to God's active sustaining of the universe through time. *God's providence is the basis of all continuity*. The continuity of the universe is not autonomous in any aspect. Christians affirm that God is present with His universe through time. He is not part of it, but He is present with it.

With respect to God's providential administration of the world, Job 38–41 is a relevant passage. God answers Job's question—"Why me, Lord?"—with a long list of things He had seen and done. "Where were you when I laid the earth's foundations? Tell me, if you have so much understanding. Who determined its dimensions? Tell me, if you know. Who stretched the measuring line over it? On what were its foundations laid? Who laid its cornerstone when the morning stars sang together and all the sons of God shouted for joy?" (Job 38:4–7). But no passage more forcefully declares God's sovereignty over the creation than Isaiah 45. The entire chapter constitutes an affirmation of the sovereignty of God, but these verses especially. "'I made the earth and created man on it. It was my hands that stretched out the heavens, and I commanded all the stars to appear. I stirred Cyrus up in righteousness, and I will smooth out all his paths. He will build

my city; he will let my exiled people go home, and not for price nor bribe,' says the Lord of hosts" (Isaiah. 45:12–13).

The twin doctrines of creation and providence are the conceptual foundations of this declaration: "For every beast of the forest is mine, and the cattle on a thousand hills" (Psalm 50:10). [North, *Psalms*, ch. 10] The twin doctrines of creation and providence establish a fundamental distinction between God as Creator and any aspect of the creation. God is in no way dependent on the creation. The creation is in every way dependent on God. God is autonomous, establishing His law for Himself and the creation. The creation is not autonomous in any way.

C. Purpose: An Analytical Category

After Christian economists have self-consciously adopted providence as the basis of their explanation for *causation in general*, they should begin to look for a *specific economic category* that enables them to explain the broadest range of economic issues. This category is purpose.

With respect to economic stewardship, meaning resource allocation governed by subjectively imputed economic value, purpose is the initial *analytical category*, because it enables us to understand men's economic actions. Economics is about human action. As an academic discipline, economics is about *human action in the free market*. (Economists generally avoid discussing economics in the church and the family, as I discuss in *The Covenantal Structure of Christian Economics*.) This raises a secondary economic question: the two kingdoms, God's and man's. Jesus made it clear that there are two kingdoms in history, not one. Humanism insists there is only one: man's. It is a task of Christian social theorists to challenge this assertion in every field of thought. In economics, the decisive separating category is purpose. Purpose preceded the creation. It therefore preceded God's ownership. Purpose helps us to understand why people allocate property in specific ways—ways that are more predictable by means of Christian economic theory than without it.

With the fall of man, there are now two families: Adam's disinherited family and Christ's adopted family. There are now two rival kingdoms: the kingdom of God and the kingdom of man. *From an economic standpoint, the category that best distinguishes them is their rival purposes*. The language of the King James Version of the Bible says it best: "No man can serve two masters: for either he will hate the one, and love the other; or else he

will hold to the one, and despise the other. Ye cannot serve God and mammon" (Matthew 6:24). Mammon is sometimes translated as money, but that does not do justice to the Greek word. It refers to more than money. It refers to wealth generally. Jesus' parable of the rich man who planned to build barns is representative.

> Then Jesus told them a parable, saying, "The field of a rich man yielded abundantly, and he reasoned with himself, saying, 'What will I do, because I do not have a place to store my crops?' He said, 'This is what I will do. I will pull down my barns and build bigger ones, and there I will store all of my grain and other goods. I will say to my soul, 'Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry.'" But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?' That is what someone is like who stores up treasure for himself and is not rich toward God" (Luke 12:16–24).

The barn builder was self-centered. It was this: *more for me in history*. In Isaiah described this outlook. "The dogs have big appetites; they can never get enough; they are shepherds without discernment; they have all turned to their own way, each one covetous for unjust gain. 'Come,' they say, 'let us drink wine and liquor. Tomorrow will be like today, a day great beyond measure'" (Isaiah 56:11–12). This is the outlook of the covenant-breaker.

Purpose lays the foundation for planning. *Purpose precedes planning*. Planning in turn lays the foundation for resource allocation. Christian economists should therefore begin with purpose as the crucial idea that links God's original creativity to man's subordinate creativity. Economics is about man's creativity in a world of scarcity. Purpose in economic theory has to do with man as a legal trustee and as an economic steward. Man's purposes should be God's purposes for him as a trustee/steward.

I argue in Chapter 6 that purpose preceded God's creation of the cosmos. I also argue that the crucial conceptual link between God and man with respect to economics is purpose. Christian social theorists must focus their studies on a discussion of man's purpose as it applies in their fields. Why purpose? *Because man's purposes reflect God's original purpose*. Man's purposes are not autonomous. They are representative. By declaring man's

purposes as subordinate to God's purposes, Christians challenge Darwinian humanists in their attempt to place man on a supposedly empty throne. Humanists correctly view purpose as the mark of sovereignty. They want man to possess this mark exclusively. Christians must counter this argument by insisting that God has never surrendered either purpose or the throne. They must defend God's sovereignty by defending (1) God's pre-creation purpose, (2) the creation, (3) God's ownership of the cosmos, and (4) God's comprehensive providence ever since. *All four concepts are necessary for understanding the biblical doctrine of God's sovereignty.* Humanists deny all four with respect to cosmic origins. They deny cosmic purpose prior to the Big Bang, at the Big Bang, and after the Big Bang until man evolved purposelessly 13.7 billion years later.

In the Darwinian worldview, purpose arrived in the universe only with advanced forms of life. Life arose out of purposeless change. Higher animals display purposeful behavior. This is how we define "higher." The closer to man that an animal is in the chain of covenantal authority, the more it displays purposeful behavior. Purposeful behavior is a series of sequential actions in which learning takes place, thereby changing the actor's future sequence of actions in what seems to be a similar environment. The main change in the environment is the animal's mastery of new information regarding causation. It learns to manipulate its environment in order to achieve its goals. It learns new connections between ends and means. It remembers them.

As far as Darwinists know, man alone has long-run purposes, which can be achieved only by complex planning. For the Darwinist, purpose was a great cosmic discontinuity in an autonomous universe. For the Christian, the creation of the universe was a great discontinuity, which was completely separate from the autonomous Creator. Purpose is eternal. The universe is not. The universe is now without end, but it had a beginning not too long ago. *God's purpose is therefore more fundamental than the universe.* It precedes action because it preceded the creation.

Humanists have made purpose the defining feature of man's sovereignty. There is a reason for this. As creatures made in God's image, humanists recognize that the defining feature of God's sovereignty is purpose. From the beginning, the creation has reflected God's purpose. This is why Christians should affirm God's purpose for creation. Humanists recognize that purposefulness is the mark of sovereignty in history. They do not officially

care about sovereignty in eternity. They see cosmic evolution as beginning in purposelessness (the Big Bang) and ending in purposelessness (the heat death of the universe). This is the price they are willing to pay in order to declare that man gets to rule as sovereign in between. This is the logical basis of their revolt against God.

While humanistic economists discuss men's purposes, they do not discuss God's purposes. This is part of humanism's deeply religious program to keep autonomous man on the throne. This is how humanists silently affirm man's sovereignty. It is *sovereignty by default*. Economists play their specialized roles in this civilization-wide operation: the kingdom of man, meaning the kingdom of mammon. To combat them, Christian economists should begin with the idea of men's purposes as reflecting God's purposes. They should begin with this confession of faith: *apart from God's purposes, men would not exist*. They would have no purposes. This was Cornelius Van Til's approach to apologetics. It is presuppositional. It affirms this: without the presupposition the Trinitarian God of creation, human thought is illogical.

The ability to devise purposes has not placed man on the cosmic throne. God already occupies it. But man's derivative purposes place mankind on the delegated throne of dominion over nature.

Conclusion

As you read each chapter in this section, you will see that I follow a specific pattern. First, I introduce each chapter with a Bible passage. This is the same strategy that I have used throughout this four-volume series. This is also the strategy that I used in all 31 volumes of my economic commentary on the Bible. This strategy is explicitly biblical.

I have read lots of articles and even books claiming to be on the topic of Christian economics. But they do not begin with an exposition of the Bible. They are not based on a comprehensive body of material that exegetes Bible passages from an economic framework. There are no supporting economic commentaries on the Bible. They do not begin with some aspect of God. Each author adopts the framework that he finds in economics textbooks in structuring his discussion of economics. He puts in some Bible verses. He may refer back to some supposedly Christian philosopher. But he does not make his case based on his own exegesis of the Bible, point by point.

In contrast, I begin with a framework that is explicitly based on the Bible: the five-point covenant model. I then fill in the outline with Bible pas-

sages. I exegete each passage. I show how it is related to a particular economic principle or category. Then I provide a detailed presentation of why this particular verses point is relevant to the field of economic theory or practice. You will see this approach in action in Part 2. In each of the chapters in Part 2, I break down the chapter into the five points of the biblical covenant model. With respect to social theory, these are as follows: sovereignty, authority, law, sanctions, and time, meaning eschatology. Each of these subcategories has an important place in every social theory, Christian and non-Christian. This is how social theory should initially be analyzed by Christians. We should be more self-conscious about this. We need a reconstruction of social theory in general. I then show how these categories apply to the field of economics, meaning to each of the five main categories of economic theory. There is a cookie-cutter element in this approach, but this approach guarantees that I will not miss anything significant. I will not mention lots of things in Part 2, but I will deal with subcategories within each category that have to be dealt with in order to understand Christian economics.

6

PURPOSE

In the beginning was the Word, and the Word was with God, and the Word was God. This one was in the beginning with God. All things were made through him, and without him there was not one thing made that has been made. In him was life, and the life was the light of men. The light shines in the darkness, and the darkness did not overcome it (John 1:1–5).

Giving thanks unto the Father, which hath made us meet to be partakers of the inheritance of the saints in light: Who hath delivered us from the power of darkness, and hath translated us into the kingdom of his dear Son: In whom we have redemption through his blood, even the forgiveness of sins: Who is the image of the invisible God, the firstborn of every creature: For by him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers: all things were created by him, and for him: And he is before all things, and by him all things consist (Colossians 1:12–17).

Analysis

It is clear from these passages that the Second Person of the Trinity created the cosmos. He was later incarnated bodily as Jesus Christ. We cannot separate the creation from the Trinity, but we can and must assert that there was specialization in the creation process.

As you will see in this chapter and those that follow, I begin Section 1 of Analysis with a theocentric law. Why? Because I begin judicially with the creation. Christ's creation of the cosmos established His legal ownership of it (Psalm 24:1–2). [North, *Psalms*, ch. 5] He is the center of the universe covenantally. But, even before the creation, there was purpose. The creation was governed by a supreme purpose. This purpose was redemptive. Paul wrote: "God chose us in him from the beginning of the world, that we may

be holy and blameless in his sight in love. God chose us beforehand for adoption as sons through Jesus Christ, according to the good pleasure of his will" (Ephesians 1:4–5). Furthermore, "In Christ we were appointed as heirs. We were decided on beforehand according to the plan of him who works out everything according to the purpose of his will" (Ephesians 1:11). So, at the heart of economic theory is God's purpose for the creation. Only after I have discussed the theocentric law do I go on to representative law and stewardship law.

1. Covenantal Foundations

This chapter is an extension of the first law under **judicial (theocentric) laws**: *God owns everything*. In Chapter 2, I wrote: "I devote Chapter 1 of *The Covenantal Structure of Christian Economics* to this topic: 'The Judicial Sovereignty of God.' Here is where Christian economics departs from humanistic economics: at the beginning. I do not mean merely the beginning of economic analysis. I mean the beginning of time: the creation. The universe began with God's creation. So, not only is God in the picture, but this God is sovereign. He is sovereign because He created the universe out of nothing. In doing this, He thereby established full ownership of the earth. 'The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers' (Psalm 24:1–2). Therefore, Christian economics announces: 'God owns everything'" (2:C:1).

This chapter is also an extension of the first law under **judicial (representative) laws**: *owners are trustees*. In Chapter 2, I wrote: "This is delegated ownership. This is not original ownership. It is judicially based on God's original ownership. Here is the supreme implication: this form of ownership is in no way autonomous. This is why Christian economics rejects any suggestion that there is autonomy in economic relationships. All wealth, including knowledge, is delegated by God to men" (2:D:1).

This chapter is also an extension of the first law under **stewardship laws**: *purpose precedes planning*. In Chapter 2, I wrote: "Man is made in the image of God. Thus, when a man thinks purposefully, he represents God. He is thinking in terms of the first point of the covenant, which is the sovereignty of God. The sovereignty of God is demonstrated in God's creation of the universe out of nothing. This is why purposeful human action reflects God's creativity. This is how we know that God is creative. He has purposes before He has plans of action" (2:E:1).

2. Purpose Preceded Creation

There was purpose before time began: God's redemption of His people. Redemption from what? From sin. But sin came after day one. This means that *redemption must shape our understanding of the dominion covenant.* The New Testament affirms that Jesus is the Redeemer. It also reveals that Jesus, as the incarnation of the Second Person of the Trinity, was also the Creator. John affirmed this. "He was in the world, and the world was made through him, and the world did not know him. He came to his own, and his own did not receive him. But to as many as received him, who believed in his name, he gave the right to become children of God" (John 1:11–12). Paul said the same thing. "God chose us beforehand for adoption as sons through Jesus Christ, according to the good pleasure of his will. Our adoption results in the praise of his glorious grace that he has freely given us in the One he loves" (Ephesians 1:5–6). There was an original purpose for the creation: *God's redemption of specific covenant-breakers.* They are adopted out of the disinherited covenantal family of Adam. This is an aspect of inheritance (point five of the pre-fall economic covenant). Christ's creation of the universe out of nothing had to do with dominion (Genesis 1:26–28), but the dominion covenant looked forward to God's program of redemption: a payment by Jesus Christ to God on behalf of specific individuals. Both creation and redemption have their origin in the person of Jesus Christ. *It is a serious theological mistake to separate creation from redemption.*

God also had a plan. He had a decree. These were not sequential chronologically. There was not yet time. But, conceptually, purpose preceded planning. *The model for purposeful human action is God's purpose in creating the universe.* The universe is theocentric. Christians should begin with the creation in their understanding of cosmology. The world works in a covenantal way because God is sovereign. The supreme mark of His sovereignty is His creation of the universe out of nothing. Man had nothing to do with this.

How should this insight affect Christian behavior? The supreme purpose for Christians is this: "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). [North, *Matthew*, ch. 15] Men are to seek God's kingdom in their lives. "Ask, and it will be given to you. Seek, and you will find. Knock, and it will be opened to you. For everyone who asks, receives; everyone who seeks, finds; and to the person who

knocks, it will be opened" (Matthew 7:7–8). [North, *Matthew*, ch. 16] This is a required procedure. Before someone can develop a plan of action, he needs purpose. There is no escape from the fundamental principle: *purpose precedes planning*. This is true in every area of life, not just economics.

God's purpose and His plan are conceptually distinct categories. They were pre-creation. They existed outside of time. There is no meaning to chronological sequence when applied to the world before the creation. For man, purpose and planning are sequential. Purpose precedes planning.

This leads us to the distinguishing feature of Christianity, separating it from all other religions: the doctrine of the Trinity. Here is where Christian economics departs from Jewish economics, which does not exist as a separate discipline, and Islamic economics, which does. "God said, 'Let us make man in our image, after our likeness. Let them have dominion over the fish of the sea, over the birds of the sky, over the livestock, over all the earth, and over every creeping thing that creeps on the earth'" (Genesis 1:26). The words are clear: "our image." With the advent of Jesus Christ, the Second Person of the Trinity, God the Son, Christianity was able to extend the implications of the Old Testament. This extension includes insights into the nature of the sovereignty of God. This planning operation was a joint process. There was cooperation and discussion. The same was true of God's decision to destroy men's cooperation in building the tower of Babel. "Come, let us go down and confuse their language there, so that they may not understand each other" (Genesis 11:7). This indicates that there was a *reconciliation of plans* before man's creation and before Babel's destruction took place. This concept of plan reconciliation is extremely important in developing an explicitly Christian economic theory.

God is both one and many. He is three Persons in one being: Father, Son, and Holy Spirit. This means that there is an underlying cosmic foundation for all issues that reflect both the unity and plurality of man. Man is made in God's image. Mankind therefore reflects both the unity and plurality of the Godhead.

A. Purpose and Redemption

I begin with God's original purpose for the creation. God is the model. God had a purpose for the creation before he began to create. I begin with God, not with man. We can learn a great deal from Genesis 1 regarding the implementation of God's plan for the ages, but even before there was a plan

for the ages, there was purpose. When I say "before," I mean conceptually. Obviously, there was no chronology prior to the creation. Our concept of time is governed by chronological sequence. Chronological sequence began with the creation week, not before. But, from the point of view of making sense of our own lives, as creatures made in God's image, we have to use language and concepts suitable for creatures and not the Creator.

1. Redemption

The purpose of the creation was originally redemptive. I have already explained this. When we say *redemption*, we mean *bought back from sin*. It would be a mistake to explain Satan's temptation and man's fall in terms of the cleverness of Satan in overcoming God's plan for the ages. Perhaps Satan indulges in such a fantasy, but the biblical texts do not support it. The concept of redemption has an economic element in it. It means that Jesus Christ had to pay a price. He had to pay it to somebody else: God the Father. This raises the idea of representation. That is inherent in the Christian concept of redemption. Jesus Christ is the Redeemer. But, as I have shown, He is also the Creator. There was a hierarchical, representative element in the creation.

Once we understand this, we can see that man is not autonomous. Man functions as a judicial trustee and as an economic steward for God. *Man's purposes are always subordinate to God's purposes*. Christians should be self-conscious about this. This is why I began my discussion of God's purpose within the context of an ultimate hierarchy, meaning an ultimate system of judicial representation. This hierarchical system of representation began before the creation. In this sense, it is theocentric. Even within the Godhead, there was a system of hierarchy of the three Persons of the Trinity with respect to the creation. *This is the model of hierarchy*. The Second Person of the Trinity was not autonomous in His work of creation. In his incarnation as the person of Jesus Christ, He was also not autonomous. In neither His office as Creator nor Redeemer is the Second Person of the Trinity autonomous.

This should be the biblical cosmic framework and also the theological framework of any Christian presentation of man's purposes. This applies to every aspect of man's decision-making. This is why it applies to all social theory. I am using economics as a model of how Christians should approach social theory.

2. Individual Purpose

Individual purpose is the primary motivation in history. In the Bible's account of redemption, people are either saved or lost. It is clear from Matthew 25 that each individual should pay attention to this distinction. This is the great biblical chapter on the saved and the lost, the sheep and the goats (vv. 31–42). This description of the final judgment is introduced by the parable of the talents (vv. 14–30). [North, *Matthew*, ch. 47] This is clearly an economic parable. It is presented in terms of the categories of economic profit and loss. Jesus offered this pocketbook parable because He wanted His listeners to understand the great theological point regarding eternal personal salvation and eternal personal damnation. Jesus understood that individuals seek to better their conditions. They seek to exchange their present conditions for better conditions. Jesus made it clear that present conditions in history are related covenantally to each individual's eternal condition. Life truly is a matter of ends and means. It truly is a matter of profit and loss.

This was the dominant theme of Ludwig von Mises in his magnum opus, *Human Action*. He built a deductive system of economic analysis on the simple statement that people act. Human action is purposeful action. Mises developed a comprehensive deductive economic system based on this simple concept. But Mises used this approach to exclude God from any consideration in either economic reasoning or historical events. He argued that God, being perfect and therefore content, cannot act. Perfection is antithetical to action. He wrote this in *Human Action.*

> Scholastic philosophers and theologians and likewise Theists and Deists of the Age of Reason conceived an absolute and perfect being, unchangeable, omnipotent, and omniscient, and yet planning and acting, aiming at ends and employing means for the attainment of these ends. But action can only be imputed to a discontented being, and repeated action only to a being who lacks the power to remove his uneasiness once and for all at one stroke. An acting being is discontented and therefore not almighty. If he were contented, he would not act, and if he were almighty, he would have long since radically removed his discontent. For an all-powerful being there is no pressure to choose between various states of uneasiness; he is not under the necessity of acquiesc-

> ing in the lesser evil. Omnipotence would mean the power to achieve everything and to enjoy full satisfaction without being restrained by any limitations. But this is incompatible with the very concept of action. For an almighty being the categories of ends and means do not exist. He is above all human comprehension, concepts, and understanding. For the almighty being every "means" renders unlimited services, he can apply every "means" for the attainment of any ends, he can achieve every end without the employment of any means. It is beyond the faculties of the human mind to think the concept of almightiness consistently to its ultimate logical consequences. The paradoxes are insoluble. Has the almighty being the power to achieve something which is immune to his later interference? If he has this power, then there are limits to his might and he is no longer almighty; if he lacks this power, he is by virtue of this fact alone not almighty (II:11).

Mises was wrong. The Bible teaches us that God has acted in history. It also teaches that He is perfect. *Christian economics must therefore reject Mises' rationalistic humanism*. It must insist that there is purpose in the universe because God created it purposefully and sustains it providentially.

Mises' view echoed Frank H. Knight, the intellectual founder of the Chicago School of economics. Knight was a vocal atheist. In a 1940 article for the academic journal, *Ethics*, he wrote the following. "God must not be thought of as statically complete or 'infinite,' in any ordinary meaning. In fact the idea of omnipotence, omniscience, and infinite goodness or self-contradictory; in the final analysis they negate the ideas of power, knowledge, and goodness. If God, or the ultimate cosmic reality, is to have any of these spiritual attributes—to which "taste" should certainly be added—he must be thought of in essentially human in terms of struggle to achieve the several values." The article appears in his book, *Freedom and Reform* (1947), Chapter XI. The quote appears on page 296. God cannot possibly be what the Bible says He is. He must be conceived of as being in man's image, not the other way around.

Mises argued that God, being perfect, cannot act.

> Action is a display of potency and control that are limited. It is a manifestation of man who is restrained by the circumscribed

> powers of his mind, the physiological nature of his body, the vicissitudes of his environment, and the scarcity of the external factors on which his welfare depends. It is vain to refer to the imperfections and weaknesses of human life if one aims at depicting something absolutely perfect. The very idea of absolute perfection is in every way self-contradictory. The state of absolute perfection must be conceived as complete, final, and not exposed to any change. Change could only impair its perfection and transform it into a less perfect state; the mere possibility that a change can occur is incompatible with the concept of absolute perfection. But the absence of change—i.e., perfect immutability, rigidity and immobility—is tantamount to the absence of life. Life and perfection are incompatible, but so are death and perfection (II:11).

The Bible is clear: God is perfect, yet He acts in history. Mises' humanistic logic led him to dismiss the biblical description of the God who is sovereign over history. This undermined his concept of historical causation.

Mises was correct in beginning with purpose as the initial category of human action. He was incorrect in beginning with man rather than with the Trinity. But, in discussing economic theory, he was correct in not starting with scarcity. He started with individual decision-makers. My analysis does the same. But mine always places individual decision-making within a framework of covenantal responsibility. Man is responsible upward to God, outward to those not under his legal jurisdiction (customers), downward to those under his legal or economic authority, and inward to himself (conscience). The decision-maker is never autonomous. He always operates within this system of personal responsibility, which is hierarchical.

The analytical starting point of Christian economics should begin with this question: "Whose purposes are authoritative?" The correct biblical answer: God's purposes. Therefore, men are to subordinate their purposes to God's purposes for them. God's purposes provide the standards of purpose, both individual and corporate. These standards are ethical. But they are also eschatological: the last things. They are therefore historical: getting from now until then. This is progressive sanctification, both individual and corporate. Men must progressively conform their thoughts, words, and deeds to God's ethical requirements, as revealed in the Bible.

We live in a fallen age. The term *uneasiness* would not be appropriate to the pre-fall world of Adam. Adam was not driven by uneasiness until his wife tempted him to eat the forbidden fruit. The dominion impulse was originally not based on anything lacking in man's personality. Man was created perfect. The world was created perfect. But neither man nor the world was fully mature. Man never becomes fully mature in the sense that God is mature. God is infinite; man is not. But man's finitude is not a defect in man's condition.

Paul wrote about contentment. "Now godliness with contentment is great gain. For we have brought nothing into the world. Neither are we able to take out anything. Instead, let us be satisfied with food and clothing. Now those who want to become wealthy fall into temptation, into a trap. They fall into many foolish and harmful passions, and into whatever else makes people sink into ruin and destruction. For the love of money is a root of all kinds of evil. Some people who desire it have been mislead away from the faith and have pierced themselves with much grief" (I Timothy 6:6–10). With respect to ownership, we are be content with very little. This takes great spiritual maturity. It takes courage. So, with respect to how most men are motivated, Mises was correct. Most men are discontented. They strive to improve their conditions by becoming wealthier. This is the religion of mammon: *more for me in history*. The religion of "more" is inherently insatiable. Mises would have admitted this. That is because he based all human action on the concept of insatiability. That is to say, built his theory of human action on a theory of finitude striving to be infinite.

I single out Mises, not because he was unique in his outlook on human motivation, but because he was uniquely forthright. All humanistic economists begin with the contrast between the individual's supposedly infinite desires in relation to a finite number of resources: *infinite ends vs. limited means*. They see ends and means in terms of the categories of infinite vs. finite. They are implicitly comparing man with God. This is the Adamic mistake: the original Adam and also Adam Smith. This is the desire to become God. This is manifested in economic theory in the concept of equilibrium, a conceptual model that rests on the idea of man's action in a world without uncertainty. In other words, it is a world in which man is omniscient. This model is ultimately self-contradictory. It is therefore irrational. I have explained why in Chapter 54 of the *Teacher's Edition*.

Covenant-breaking man does act from a sense of discontent. He is al-

ways pursuing more. He never has enough. This is the religion of mammon. It is insatiable. This is not to be the economic model for Christian economics. The fact that we are finite should not bother any Christian. The fact that the dominion covenant is eternal should also not bother any Christian. It was eternal for Adam and Eve. There will always be an unbridgeable discrepancy between man's knowledge, power, and wealth when compared with God's. This did not bother Adam until he recognized the meaning of the boundary around the forbidden tree. This boundary announced that he was not God. He did not understand good and evil in the way that God did. This bothered him. It was not supposed to bother him. It still bothers covenant-breaking man. It should not bother covenant-keeping man.

Therefore, when we come to the question of purpose, the purpose is always theocentric. Covenant-keeping man's purpose is to build the kingdom of God. This kingdom is corporate.

B. Individual Purposes and Corporate Benefits

Jesus made this clear: "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). He also made this clear: "No man can serve two masters: for either he will hate the one, and love the other; or else he will hold to the one, and despise the other. Ye cannot serve God and mammon" (Matthew 6:24, King James Version). Other translations translate *mammon* as *money* or *wealth*. The word came into the Greek language by way of the Hebrew cognate language, Aramaic. From the context of Jesus' words, this was a form of service that bordered on the religious. Jesus was speaking of mammon as if this were another god. I think the best assessment of the meaning of the word is this: *more for me in history*. [North, *Matthew*, ch. 14]

There is now competition in the world for dominion. Covenant-breakers and covenant-keepers have rival purposes. They serve rival kingdoms. Yet they both are driven by the desire to expand their dominion in history. Karl Marx said that the world is driven by class competition. He was incorrect. *The world is driven by covenantal competition*. This is the biblical worldview.

The great insight of Adam Smith was this: when acting to improve their individual conditions, people serve each other in the market. This mutual service increases a nation's wealth, yet this was not the purpose of competing individuals in the marketplace. The purpose that drives an individual is the desire to improve his personal circumstances, not increase national

wealth. Nevertheless, individual purpose and individual striving after personal goals have the beneficial result of increasing per capita wealth for other participants in the marketplace. Smith titled his book *The Wealth of Nations*, and it was correctly titled. The word "nations" was plural. It is not just that individual striving after wealth increases the wealth of those inside the geographical boundaries of one nation. Where there is free trade across national borders, individual striving after wealth increases wealth in more than one nation. All free market economists argue along these lines.

Smith's insight was one of the most important intellectual breakthroughs in the history of man. For millennia, ethical leaders had disparaged the pursuit of individual gain. But Smith showed that, because of the effects of competition in the marketplace, many individuals are benefitted. *Competition within the framework of the market process is not destructive of the social order.* On the contrary, it improves the wealth, knowledge, and way of life available to the masses as never before in history. This was done initially through mass production and price competition. Poor people who could never have afforded the luxury of several changes of clothes could now afford to buy mass-produced cotton clothing that could be easily washed and ironed. The mass production of cotton clothing was the first great breakthrough of the Industrial Revolution. It began in earnest in the final quarter of the eighteenth century. It transformed Great Britain and the North American English-speaking colonies, and then it soon transformed Western Europe.

C. Limits to Be Overcome

Because of man's sin, God cursed man and the earth (Genesis 3:17–19). [North, *Genesis*, ch. 12] This placed extra limits on the productivity of mankind. But God always intended for these limits to be overcome through man's efforts. God does not want people to remain satisfied with these limits on man's productive activities. This is why Jesus included this request in what is known as the Lord's prayer: "Give us today our daily bread" (Matthew 6:11). [North, *Matthew*, ch. 12]

God had a purpose in imposing curses on man's world. He wanted men to cooperate with each other. The reduction in individual productivity associated with the curse of the ground forced men to cooperate with each other in order to gain the added productivity associated with an increased division of labor and therefore also the associated increase in the specializa-

tion of production. The curse of the ground was a curse, but it was also a blessing. If sinful men had not been restrained by reduced productivity, they would have spent their lives pursuing low-cost evil. *The lower the price of evil, the more would have been demanded*. Even with the curse, men achieved great evil, which is why God brought a great flood. He offered an ark as a place of safety. The ark provided boundaries against the flood.

There is an inherent scarcity associated with finitude. Scarcity existed before the fall of man. But the cursed scarcity that exists today can be steadily overcome through covenant-keeping, which includes respect for private property, self-restraint on jealousy and envy, and unlawful coveting. Biblical law is opposed to these thoughts and their activities. When people honor biblical law as it applies to private property and private ownership, and when civil law does not interfere with men's attempts to work out exchanges with each other, we see the limits of cursed scarcity rolled back. People living in the scarcity-dominated world of 1800 would not have been able to conceive of the wealth that poor people enjoy around the world today, with a few regional exceptions. These exceptions will probably not be exceptions by the middle of the twenty-first century.

God imposed boundaries on men's productivity that did not exist before the fall. These boundaries can be overcome by covenant-keeping. By honoring the ethical boundaries imposed by biblical law, mankind can roll back much of the curse that was imposed on mankind as a result of Adam's violation of the ethical and judicial boundary around the forbidden tree. God imposed boundaries on man's productivity because Adam and Eve had violated the judicial boundary that God had placed around His private property.

It is therefore legitimate for people to adopt a purpose of gaining increased individual and family wealth. Because a God-honoring society establishes laws protecting property, men who live in such a society have valid ways of cooperating with each other in productive ventures. By seeking their personal self-interest through voluntary exchange, including the exchange of labor, they benefit society as a whole. They benefit other individuals by means of their own increased productivity. This is why the boundaries associated with the curse of the ground are not entirely curses. They promote cooperation, capital investment, and greater output per unit of resource input.

D. The Lawful Pursuit of Profit

Jesus spoke of two kingdoms: the kingdom of God and the kingdom of mammon. They are the kingdoms, respectively, of covenant-keepers and covenant-breakers.

Because of the free market social order, it is lawful for dedicated members of both kingdoms to pursue their own individual purposes of increasing their wealth. They do this through voluntary exchange. A small percentage of them do it by becoming entrepreneurs. Entrepreneurs are skilled at forecasting the future economic state of affairs, and then devising plans that may enable them to profit in the future by selling consumers what consumers want to buy at prices consumers are willing to pay. Profit is the positive sanction that paying consumers provide to those producers who have met consumer demand at prices consumers are willing to pay. Losses are the negative sanctions that customers impose on producers who have not met their specifications at prices they are willing to pay. They impose these sanctions simply by not purchasing the output of entrepreneurs who have failed to meet the standards required by paying customers.

When members of both kingdoms are successful in their pursuit of profit, this benefits the members of both kingdoms. I do not mean that the productive enterprises of members of one kingdom benefit only members of their own kingdom. On the contrary, the increased productivity of members of one kingdom benefits members of the other kingdom. This is the great benefit of voluntary exchange. Adam Smith understood this in 1776. This was why he was an advocate of international free trade. He understood that citizens on each side of a national border benefit from the productivity of citizens on the other side of the border. Citizens on both sides of the border have an increased range of choice. There are more goods and services available because of the productivity of people on the other side of the border.

E. Purpose Beyond the Grave

We come to the great discrepancy between the kingdom of God and the kingdom of mammon. The kingdom of God has to do with the sovereignty of God in His grace of redeeming fallen individuals and fallen societies. *Redemption is both individual and corporate.* That is because man is both individual and corporate. That is because the Trinity is both individual and corporate. In contrast, the kingdom of mammon is grounded in this confes-

sion of faith: "more for me in history." The kingdom of mammon cannot offer consumption beyond history.

In his exposition on the various dead ends of all forms of humanistic philosophy and living, the author of Ecclesiastes made clear the fundamental problem with the kingdom of mammon: the issue of economic inheritance. "I hated all my accomplishments for which I had worked under the sun because I must leave them behind to the man who comes after me. For who knows whether he will be a wise man or a fool? Yet he will be master over everything under the sun that my work and wisdom have built. This also is vapor. Therefore my heart began to despair over all the work under the sun that I did. For there might be someone who works with wisdom, with knowledge, and skill, but he will leave everything he has to a man who has not made any of it. This also is vapor and a great tragedy. For what profit does the person gain who works so hard and tries in his heart to complete his labors under the sun? Every day his work is painful and stressful, so at night his soul does not find rest. This also is vapor" (Ecclesiastes 2:18–23). [North, *Ecclesiastes*, ch. 4]

Cosmic death is the promise by and for cosmic Darwinian evolution. Everything will be swallowed up in the heat death of the universe. There will be no meaning to life when life throughout the universe ends. There will be no one to impute meaning retrospectively to the lives of each of us in history. There will be only impersonal cosmic death, which is a fitting end for the impersonal Big Bang, which supposedly began it all. Darwinian cosmology has this tombstone: "From purposelessness to purposelessness." It has a confession of faith: "Purposelessness giveth, and purposelessness taketh away." I discuss this in greater detail in Appendix B.

Purpose is inescapably eschatological. It has to do with a personal eschatology: where each individual will spend eternity. It also has to do with corporate eschatology: the kingdom of God vs. the kingdom of mammon. Individuals are motivated by the issues of eschatology. This is why Matthew 25 is such an important chapter in the Bible. The willingness of individuals to sacrifice in the present for the sake of the future is an eschatological issue. It is this issue: "What is the motivational cutting-off point chronologically for personal self-sacrifice?" It is also this issue: "What is the motivational cutting-off point institutionally for personal self-sacrifice?" That was the question raised by Ecclesiastes. *Personal motivation has to do with posthumous inheritance*.

Conclusion

First, Christian economic theory should begin with the concept of God's creation out of nothing. So should all science. That is because the Bible starts here: "In the beginning, God created the heavens and the earth" (Genesis 1:1) This is the theologically supreme issue of *cosmology*. Genesis 1:1 establishes the Creator/creature distinction. Christian cosmology is self-consciously in opposition to evolutionary cosmology: the purposeless Big Bang to purposeless life; purposeless life to purposeful mankind. Second, Christian economics should begin with the concept of *God's original ownership*, which is the economic application of God's creation (Psalm 24:1–2). Third, Christian economics should begin with the concept of providence. So should all science. This is the foundation of *metaphysics*: why the world works coherently. This establishes the biblical principle of cosmic personalism. God's sovereignty is the foundation of cause-and-effect. Fourth, Christian economics should begin with God's purpose as a model of man's purposes. Purpose is revealed in the Bible's account of God's creation of the universe out of nothing. It is reflected by the creation. Paul was clear about this.

> For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of people, who through unrighteousness hold back [suppress] the truth. This is because that which is known about God is visible to them. For God has enlightened them. For his invisible qualities, namely his eternal power and divine nature, have been clearly seen, ever since the creation of the world, in the things that have been made. So they are without excuse. This is because, although they knew about God, they did not glorify him as God, nor did they give him thanks. Instead, they became foolish in their thoughts, and their senseless hearts were darkened. They claimed to be wise, but they became foolish. They exchanged the glory of the imperishable God for the likenesses of an image of perishable man, of birds, of four-footed beasts, and of creeping things. Therefore God gave them over to the lusts of their hearts for uncleanness, for their bodies to be dishonored among themselves. It is they who exchanged the truth of God for a lie, and who worshiped and served the creation

> instead of the Creator, who is praised forever. Amen (Romans 1: 18–25).

Purpose is the starting point of Christian economic *analysis*: how and why people act economically. Economics is the study of a specific form of human action. What is called economic science is a narrow theory of how and why people act in the judicial context of the market process, which is a gigantic auction that is governed by the judicial principle of high bid wins.

Austrian School economics is by far the most forthright in basing its economic analysis on human purpose. This is why it is the closest school of humanistic economics to Christian economics. Rival schools of economics share its humanistic presuppositions about God, man, law, sanctions and time, but they do not share its purpose-based methodology, at least not to the same degree. To this extent, they are less faithful to economic causation. But all schools of academic economic thought rely on a theory of causation that silently invokes impersonal cosmic evolution, impersonal human evolution, and atheism. To this extent, they are all wrong. They begin with a false presupposition about creation. Therefore, they cannot logically end with an accurate assessment of the way the world works. Cornelius Van Til used an analogy of a series of buzz saws that are set at incorrect angles. None of them can cut straight. But the Austrian School's buzz saw is closer to the biblical angle than the other schools of opinion on the issue of the centrality of purpose in economic analysis.

7

ALLOCATION

For which of you who desires to build a tower does not first sit down and count the cost to calculate if he has what he needs to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it will begin to mock him, saying, "This man began to build and was not able to finish." Or what king, as he goes to encounter another king in war, will not sit down first and take advice about whether he is able with ten thousand men to fight the other king who comes against him with twenty thousand men? If not, while the other army is still far away, he sends a delegation and asks for conditions of peace (Luke 14:28–32).

Analysis

This passage establishes the biblical principle of counting the costs of our actions. The decision-maker is legally responsible for his actions. He acts economically on behalf of subordinates. This concept of personal responsibility underlies the biblical doctrine of economic allocation. The steward of property is a legally responsible agent before God. I argue that the free market is the most efficient system of economic organization because it establishes a tight judicial connection between private owners and the personal economic outcomes of their actions.

1. Covenantal Foundations

This chapter is an extension of the second law under **judicial (theocentric) laws**: *God delegates ownership.* In Chapter 2, I wrote: "This is delegated ownership. This is not original ownership. It is judicially based on God's original ownership. Here is the supreme implication: this form of ownership is in no way autonomous. This is why Christian economics rejects any suggestion that there is autonomy in economic relationships. All wealth, including knowledge, is delegated by God to men" (2:C:2).

This chapter is also an extension of the second law under **judicial (rep-**

resentative) laws: *trustees possess authority*. In Chapter 2, I wrote: "This authority is legal: the authority to allocate property among competing uses. Humanistic economists refer to this allocation process as economizing. This concept is basic to humanistic economics. Owners decide what to do with their property. Christian economic theory declares that owners are God's legal trustees. Trustees decide what to do with God's property. God holds them accountable for the use of His property, as we see in Jesus' parallel parables of the talents (Matthew 25:14–30) and the minas (Luke 19:11–27)" (2:D:2).

This chapter is also an extension of the second law under **stewardship laws**: *priorities structure planning*. I wrote in Chapter 2: "Because we have limited resources, we have to allocate these resources in such a way that we hope to achieve our highest priorities. *We will run out of resources before we run out of priorities*. This is why we economize. This is the essence of resource allocation" (2:E:2).

2. Plan and Costs

Someone plans to build a tower. Building it is high on his list of priorities. He must now devise a plan to build it. He is constrained by a shortage of resources at the prices he was willing to pay. He therefore faces scarcity. He must trade either money or else something of value to secure the resources he needs to build the tower.

Jesus warned us to devise precise plans of action. A coherent plan requires the planner to make an assessment of costs. This is a present assessment of future costs. It involves forecasting. We call this art of forecasting "entrepreneurship."

What does it mean to count the cost? This involves estimating subjective benefits at some point in the future. It also involves estimating the subjective costs. This is called a cost-benefit analysis. It is a forecast, not an exercise in retrospective accounting. Planning is an aspect of point two of the covenant. Assessing costs and benefits retroactively is point four. Point two and point four are always linked.

Jesus' parallel parables of the talents (Matthew 25:14–30) and the minas (Luke 19:11–27) deal with the entire entrepreneurial process: *forecasting, planning, implementing, and the day of reckoning*. The parable of the talents appears in a passage dealing with God's final judgment (vv. 31–46). Jesus presents the story of a rich man who allocates capital to three servants. He

gives them coins (talents). Then he departs. He returns and demands an accounting. He assesses the performance of each servant. He then announces his judgment. This is an aspect of point four: sanctions/judgment. Two servants performed well; the third did not. He offers an excuse. He says that he had assessed the ethics of the master. He tells the master that he believed that he was a hard man, an unfair judge. So, he buried his coin.

> Then the servant who had received one talent came and said, "Master, I know that you are a strict man. You reap where you did not sow, and you harvest where you did not scatter. I was afraid, so I went away and hid your talent in the ground. See, you have here what belongs to you." But his master answered and said to him, "You wicked and lazy servant, you knew that I reap where I have not sowed and harvest where I have not scattered. Therefore you should have given my money to the bankers, and at my coming I would have received back my own with interest. Therefore take away the talent from him and give it to the servant who has ten talents. For to everyone who possesses, more will be given—even more abundantly. But from anyone who does not possess anything, even what he does have will be taken away. Throw the worthless servant into the outer darkness, where there will be weeping and grinding of teeth" (vv. 24–30).

The steward had made an inaccurate ethical assessment. He had assessed the ethics of the owner one-sidedly. Yes, the man was harsh, but only with stewards who were poor performers. He treated productive stewards well, giving them rewards. The poor performer had estimated only the potential cost of failure, not the potential benefit of success. This inaccurate assessment had led him to make an inefficient allocation of resources: the coin. He returned the coin that he had been handed. This was not good enough, announced the owner. He could at least have deposited the master's money with bankers, who would have paid a rate of interest. (This is the strongest statement in the Bible in favor of interest-paying and therefore interest-collecting bankers.) So, the coin's owner took the coin and handed it to the best-performing steward. He then cursed the unfaithful steward.

The unfaithful steward had made a second inaccurate ethical assessment. He had failed to understand the owner's ethical standard. The owner

did not reap where he did not sow. On the contrary, he reaped where he had sown. The steward had not understood that he himself was the soil into which the owner had sown seed that should have produced an abundant crop. The seeds that he had sown with the other two stewards had produced abundant crops. [North, *Matthew*, ch. 47]

This is the story of man's history. There are winners and losers. There are faithful stewards and unfaithful stewards. They are all judged by the same standard. The owner departs for a time to see how they will perform. This is what God did in the garden of Eden. It is the archetype for entrepreneurship. It is based on a hierarchical allocation of assets: from God to men. They in turn must allocate these assets. There will be a day of final accounting.

3. Estimate the Benefits

The successful stewards had estimated the future benefits. They had wisely allocated the capital entrusted to them. They understood this biblical principle. "The one who sows sparingly will also reap sparingly, and the one who sows for the purpose of a blessing will also reap a blessing" (I Corinthians 9:6b). [North, *First Corinthians*, ch. 11] They had not been paralyzed with fear. They had understood that the owner was an honest man who would reward productivity with blessings. Jesus put it this way. "Give, and it will be given to you. A generous amount—pressed down, shaken together and spilling over—will pour into your lap. For with the measure you use, it will be measured back to you" (Luke 6:38). [North, *Luke*, ch. 11] The context of this statement had to do with generous giving, but the same principle also had to do with wise investing. We read in Proverbs: "Be sure you know the condition of your flocks and be concerned about your herds, for wealth is not forever. Does a crown endure for all generations? You should know when the hay is gone and the new growth appears, and the time when the grass from the hills is gathered in. Those lambs will provide your clothing and the goats will provide the price of the field. There will be goats' milk for your food—the food for your household—and nourishment for your servant girls" (Proverbs 27:23–27). [North, *Proverbs*, ch. 79.] This has to do with wise investing and careful management. So does this: "Look at the ant, you lazy person, consider her ways, and be wise. It has no commander, officer, or ruler, yet it prepares its food in the summer and during the harvest it stores up what it will eat" (Proverbs 6:6–8). The ant is self-motivated. It prepares for the future. [North, *Proverbs*, ch. 12]

4. Subjective and Objective Forecasting

The forecaster must consider both his future income and his future costs in terms of his present subjective assessment of future subjective economic value. He asks: "What will the benefits and costs be for me?" This is an aspect of point four: imputation. He wants a net profit of benefits over costs. He imputes present value to an expected future economic condition. That condition will be both subjective and objective. To understand this, we must consider Jesus' story of the king facing an invading army. When someone is counting the size of an invading army, this is an objective estimate. It is a matter of counting men and equipment on both sides. But there are also subjective elements, such as the subjective cost of lost honor. This subjective estimation of honor has kept armies intact on battlefields from the beginning of warfare.

In Jesus' example of the looming battle, the forecaster is warned to count the benefits of peace. The king should ask himself: "Will my army be victorious?" Jesus identified this assessment. "If not, while the other army is still far away, he sends a delegation and asks for conditions of peace" (Luke 14:32). The estimated subjective benefits of peace without honor may outweigh the expected subjective costs of a defeat with honor. But there is unquestionably a pair of objective outcomes: defeat or victory. These are not figments of the king's imagination. [North, *Luke*, ch. 35]

Christian economics must take account of both subjective costs and objective costs. To ignore either is to make a conceptual mistake.

A. Ownership and Responsibility

Christian economics insists that all ownership except God's original ownership is delegated ownership. This means that ownership is a combination of trusteeship and stewardship. From the point of view of economic analysis, stewardship is secondary to trusteeship. The owner of the property ultimately acts in the name of God. But humanistic economics does not acknowledge this. Ownership is said to be autonomous. An individual owns something. He is responsible to himself.

The person who owns something cannot escape the responsibility of deciding what to do with whatever it is that he owns. There is an inescapable connection between responsibility and ownership. There is also an inescapable responsibility of ownership on behalf of somebody else. If something commands a price, it means that people are bidding for ownership of the

item. If an individual owns anything that has a price attached to it, he faces the responsibility of deciding what to do with the asset. He can keep it. He can use it himself. But he will have to pay to do this. He will have to pay whatever he would have been able to sell the item for. He will pay for it with whatever the money would have bought, which he will not enjoy because he decides not to sell it or rent it.

This is inescapably a doctrine of representation. Representation is an aspect of point two of the biblical covenant. Inescapably, an owner represents God, and he also economically represents the person who is offering the highest price that he can get. He is holding that property in reserve. He may be holding it for himself. He may be holding it for the highest bidder in the future. He may be holding it for his covenantal heir.

What appears to be unencumbered ownership is in fact encumbered. It is encumbered economically because it has a price. The allocation decision as to who will become the owner in the future is the responsibility of the person who presently owns the item. This is another way of saying that *ownership is a social function*. Ownership is not autonomous precisely because the asset has a price.

Then there is corporate ownership. As is true of the Trinity, man is both one and many. There are individuals. There are corporate entities. *Responsibility is therefore both individual and corporate*. So, purpose is both individual and corporate. Men act in an environment, and this environment is in part social. Man is a social being. An individual selects his purposes and a specific concept of causation in terms of what he has learned from his membership in multiple groups. The concept of the autonomous individual is as incorrect as the concept of the autonomous group. Christian epistemology must affirm both unity and diversity. *Any discussion of economic causation must begin with both the acting individual and the acting group*. It must begin with a discussion of the formation of individual plans as being, from the beginning, the product of previous plans that were themselves reconciled plans.

In discussing human action, we must begin with God as Trinity, as revealed in Genesis. We must not begin with Robinson Crusoe or any other solitary decision-maker. A true Crusoe is an heir of all of the implemented plans that influenced his thinking. He is responsible before God for a kingdom-enhancing formulation of new plans and their implementation. He is not autonomous. He is an heir of capital supplied by God. The most valuable form of capital is accurate knowledge, coupled with the wisdom and cour-

age to implement it. The use of Crusoe is widespread in economic textbooks. While this teaching technique is legitimate for showing people's priorities in the allocation of scarce resources, it is misleading. It assumes autonomy. There is no such thing as autonomy in the creation.

B. Scale of Economic Values

The person possessing assets must make a decision regarding the correct allocation of those assets. His sense of purpose will influence the plans that he makes for the allocation of these assets. As I have said in the previous section, purpose precedes planning. Planning involves the allocation of scarce economic resources. An individual decides what his priorities are with respect to a particular scale of values. He has certain goals in mind that are consistent with his overall purpose. These goals are hierarchical in the sense that there is a sequence to them: first, second, third. With whatever resources he possesses, he allocates them in such a way that he achieves the highest goals on his list of possible goals. He subjectively imputes value to each of the goals, and then he allocates objectively whatever resources he controls in order to attain these goals.

As an individual allocates wealth, probably money, in order to attain his goals, each successive goal that he attains is worth less to him than the immediately preceding goal, other things remaining constant. Of course, if his tastes change in the meantime, the next goal that he achieves may be of higher value than it was when he made the immediately prior expenditure. But, in order to explain how someone makes allocation decisions, economists assume that his tastes do not change in the meantime. Because each goal that he attains with his remaining money is lower on his scale of priorities or economic values, economists speak of declining marginal utility. This is a way of describing the motivation behind people's expenditures. People are surrendering something of value: money, the most marketable commodity. Each expenditure is made in order to attain a goal that was lower on the hierarchical list of priorities than the previous goal. These decisions are individual decisions. They are decisions to do one thing rather than another. They are decisions that involve spending money on one thing rather than another. In other words, they are highly specific. They represent the purchase of *this* rather than *that*.

This outlook is basic to Christian economic theory. Why? Because God holds each person responsible for his thoughts, words, and deeds. This re-

sponsibility is comprehensive. Jesus warned: "I say to you that in the day of judgment people will give an account for every idle word they will have said" (Matthew 12:36). Paul wrote: "Whatever you do, in word or in deed, do all in the name of the Lord Jesus. Give thanks to God the Father through him" (Colossians 3:17). [North, *Epistles*, ch. 26:A:2] *Personal responsibility always accompanies ownership.* What we do with whatever God has delegated to us testifies for or against us. This is the message of the parallel parables of the talents (Matthew 25:14–30) and the minas (Luke 9:11–27).

C. Budgeting

We live in a finite world. We live in a cursed finite world. This is the basis of the doctrine of scarcity. This is the starting point for most economic theory. Each decision-maker has limited resources. He cannot achieve all that he wishes to achieve with the money he owns and the time remaining to him. This means that decision-makers have to budget both their money and their time. They have a hierarchical list of goals that they wish to achieve in a particular period of time. They know that they have limited time. They have to allocate their time carefully. The more money they possess, the more that they can achieve in the time that they have budgeted. Looking at it from the point of view of time, the less time they have remaining to them, the more wealth they must possess in order to achieve their goals. *There is a constant trade-off between time and money.* This is the dilemma of all budgeting.

An individual who budgets wisely asks himself three questions. (1) What do I want to achieve? (2) How soon do I want to achieve it? (3) What am I willing to pay? These three questions must be asked repeatedly when people make fundamental decisions. Then the individual must answer these questions rationally. He assess the amount of time available to them to complete his project, and he must make an estimate on the amount of money available to him to complete the project.

1. Knowledge and Allocation

Individuals do not have clear knowledge regarding what they want to achieve. A person's list of goals is long. The resources at his disposal to achieve these goals are limited. More importantly, he does not know the future. He does not know what new opportunities are going to present themselves. He does not know if he will learn something of value that will affect his decisions

and therefore his allocation of resources. There is enormous uncertainty in life, and this uncertainty should be at the heart of economic analysis.

Jesus made it clear that we are to count the cost of our actions. But He did so within the context of uncertainty about the future. The person planning to build a tower or fight a battle had to forecast the most likely outcomes of his actions. So do we. In counting the cost of our actions, we must consider the future. There will be consequences for these actions. We must compare what we think will be the outcomes of various actions. Then we must compare the range of actions available to us within the framework of our budget. The decision to allocate resources is always a future-oriented decision.

2. Individual Budgeting

There is a saying in the United States: "You don't want to run out of money before you run out of month." This is the issue of budgeting. It is a matter of money vs. time. Both are objective constraints.

Most people have to budget their money. Only very rich people can afford not to budget their money. Adults who act responsibly learn how to budget their money. Jesus repeatedly warned that *it is far more important to budget time*. This outlook is basic to Christian economics. It is not basic to humanistic economics, which self-consciously avoids the question of the final judgment. Why is budgeting time more important, at least for people not facing starvation, i.e., a shortening of time? It is because you can earn more money by working more hours, but you lose hours. It is far easier to find ways to make more money than to find ways to extend your life. There are far more people who are ready and able to pay you money in exchange for your time than people who are ready and able to pay you extended life in exchange for your money.

Because of economic growth, there is a rising possibility that you will not die poor even if you are poor today. In contrast, there is almost zero theological possibility that you will not die. There are some Christians (premillennialists) who hold an eschatology that teaches that Jesus will soon come bodily to take His people to heaven, thereby enabling them to escape physical death. Other Christians (amillennialists) believe that the final judgment is close. They hope that they can avoid death this way. Members of both groups hope to get out of life alive. I do not recommend that you count on either of these scenarios as a way to avoid thinking about death. This slogan is true: "There are only two sure things in life: death and taxes."

It is almost universal that people for most of their lives worry more about money than they do about death. Yet death is certain; poverty is not. Why do people worry more about money than death? Because they heavily discount the future negative sanction of death. Despite the inevitability of death, people discount it in their thinking. They prefer to believe that they have at least five years to live. In contrast, money allocation issues are immediate and constant. People are more concerned about running out of money at the end of the month than they are about running out of life at the end of the month. The risk is far greater that they will run out of money by the end of the month than that they will die by the end of the month, except in their final month. *People can more easily put death out of their minds than put money out of their minds*. The short-term cost of ignoring death is lower than the short-term cost of ignoring money. However, the long-term cost of ignoring death is infinitely great for covenant-breakers, due to the permanence of the lake of fire (Revelation 20:14–15). There will be no escape. Some people discount this inevitable cost by a very high discount rate. Others deny this cost altogether. This is the legacy of Adam and Eve, whose joint cost-benefit analysis was seriously flawed. This cost-benefit analysis is now built into fallen human nature.

You must allocate both money and time. You must decide what to do with your money, and you must decide what to do with your time. You must not pay more attention to budgeting your money than budgeting your time. The Bible warns against this mistake. It would not warn against it if this mistake were not widespread. The classic biblical example of this is found in Jesus' parable of the man who owned crops and needed barns to store them. "I will say to my soul, 'Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry.' But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?' That is what someone is like who stores up treasure for himself and is not rich toward God" (Luke 12:19–21). [North, *Luke*, ch. 25]

People set priorities: goals. Then, if they do not change these goals, they take specific actions to achieve these goals. They allocate money, but they necessarily also allocate time. Because they are short of both money and time, but especially money, they allocate money to their highest priorities before they allocate money to priorities lower on their list. They understand that they have a limited amount of money. Because opportunities may change, they also understand they have a limited amount of time to take

action. They cannot achieve everything that they would like to achieve with the time and money available to them. *Their time and their money are objective constraints.* In contrast, their scale of priorities is subjectively determined. This is the result of their individual subjective imputation, which is point four of the economic covenant: assessing economic value. This is called imputation.

Christian economics insists that economic value is also objective. God imputes value subjectively, but because it is God who imputes value, this value is also objective. We know this from the account of creation in Genesis 1. God worked each day. With the exception of day two, at the end of each day He declared His imputed value of His work: "It is good." He also imputed value to his creation week: "It was very good" (Genesis 1:31b). God owns the creation. He has priorities for it. He also has a plan for it. He has established His decree for history. He will bring final judgment in terms of His ethical standards. He is constantly imputing value, both ethical and economic, to men and assets. He is the supreme Imputer of value.

Individuals are made in God's image. Therefore, they are required by God to think God's thoughts after Him. They are required by God to impute value as finite creatures analogously to God's imputation of value. People cannot escape the task of imputation. Because God requires them to count the cost, they should impute this value in advance. They should make estimations. They do not know the future perfectly. "For now we see indirectly in a mirror, but then face to face. Now I know in part, but then I will know fully just as I have been fully known" (I Corinthians 13:12). But we do know in part. We are responsible before God and men for our use of this knowledge.

3. Individual Spending

It is not sufficient to budget in advance. The individual must also spend his time and his money in terms of his plan. James wrote: "Be doers of the word and not only hearers, deceiving yourselves. For if anyone is a hearer of the word but not a doer, he is like a man who examines his natural face in a mirror. He examines himself and then goes away and immediately forgets what he was like" (James 1:22–24). This is always easier said than done. Consider dieting. People make plans about cutting their intake of calories and increasing the time and intensity of their exercise programs, but they do not always follow through. The likelihood of their not following through

is greater in most cases than the likelihood of their following through. The archetype of planning without following through in the Bible is breaking a vow to God. The following refers to a judicial oath, not simply a plan of action. "When you make a vow to God, do not delay to do it, for God has no pleasure in fools. Do what you vow you will do. It is better not to make a vow than to make one that you do not carry out" (Ecclesiastes 5:4–5). [North, *Ecclesiastes*, ch. 16]

One of the ways that people overrun their budgets is to borrow money. "The wicked person borrows but does not repay" (Psalm 37:21a). [North, *Psalms*, ch. 6] They place high value on repaying their immediate debt, but they place far less value on repaying the long-term debt that enables them to repay the short-term debt. It is easy to borrow money to meet an immediate obligation. Most debtors heavily discount the future economic cost of whatever they owe. They are present-oriented. This is the mark of the lower-class individual.

People's tastes change frequently. They can change from day to day. When their tastes change, their priorities change. When their priorities change, their budgeting plans change. When their budgeting plans change, their spending patterns change. *Humanistic economists have no way methodologically of dealing with changing tastes.* There literally is no way to account for taste, given the presuppositions of methodological individualism. There are no objective criteria for evaluating subjective tastes. Economists do not know how or why tastes change. According to philosophically aware humanists, this is an aspect of Kant's noumenal realm, which is not related causally to his phenomenal realm of science: mechanical or biological causation. Somehow, Kantians say, tastes do influence people's actions, but there is no objective, scientific (phenomenal) way to explain this. If there were, then people would lose their freedom from either mechanical, impersonal causation or else manipulation by other people.

There is no escape from this interaction between subjective valuation and objective conditions. Prices are objective; individuals' assessments of the importance of these prices are subjective. Allocation has to do with *objective spending*. But it also has a great deal to do with *subjective evaluation* of priorities and the subjective evaluation of the economic value of objective assets, such as money.

4. Collective Budgeting

Institutions have legal obligations. They also have limited objective resources, such as money, land, buildings, and equipment. Organizations' leaders make legal decisions and economic decisions. These decisions have consequences in the lives of people who are in some way connected with these organizations.

The question then arises: "How in theory can organizations impute values subjectively?" There is an explicitly Christian answer: *God is a Trinity*. God is simultaneously one and many. God imputes value collectively as well as individually. Men are made in God's image. Therefore, men can impute individually and collectively as God's representative agents. Certain individuals in the organization have the legal authority to act as representatives of the collective owners of the organization. Ownership is collective. Decision-making is judicially collective. Yet this process of decision-making has to be subjective. Individuals subjectively impute economic value, and these individuals act as representative agents of the collective organization. Because organizations can be held legally liable for their actions, they must be treated objectively.

Organizations are required by law, custom, and economic circumstances to make definitive budgeting plans. If they do not, they will go out of business or out of operation. The objective conditions of supply and demand force inefficient organizations out of the marketplace.

Organizations have priorities. These priorities rest on the subjective imputations of value by the decision-makers who are legally responsible for the organization. These people must make estimations about the objective conditions of the market, the political order, the legal order, and innumerable other conditions that face the organization. The interplay between subjective evaluation and objective conditions is more complex in an organization than it is with respect to one individual. There are competing scales of value by members of organizations. These must be reconciled by decision-makers. This is an aspect of plan reconciliation.

A strict defender of methodological individualism insists that it is impossible to make interpersonal comparisons of subjective utilities. Therefore, it is not possible to speak scientifically to issues of plan reconciliation on behalf of a group. But there are very few economists who have consistently defended such a position. I cannot think of any economist who has

written this. When it comes time to recommend policies, economists speak authoritatively regarding the right approach to solving problems. They get paid to make such recommendations.

Christians should know that God is capable of making interpersonal comparisons of subjective utility. Jesus did this. "Jesus looked up and saw the rich men who were putting their gifts into the treasury. He saw a certain poor widow putting in two mites. So he said, 'Truly I say to you, this poor widow put in more than all of them. All of these gave gifts out of their abundance. But this widow, out of her poverty, put in all she had to live on'" (Luke 21:1–4). Jesus had this ability; therefore, individuals have this ability. If they did not, it would be impossible for economists or anybody else to make objective policy recommendations that would have a likelihood of producing positive predictable results, both objective and subjective. [North, *Luke*, ch. 50:A] I have written about this in Chapter 5 of my economic commentary on Genesis, *Sovereignty and Dominion* (2012). I first wrote about it in Chapter 4 of the original edition of this commentary: *The Dominion covenant: Genesis* (1982). This has been a continuing theme in my writings on Christian economics.

Organizations allocate money and time. They are more skilled at allocating time and money than individuals are. They hire specialists to do this. Organizations have detailed sequential timelines. They have specific deadlines to meet. They have procedures that allow specialists to monitor people's performance over time. If organizations did not have these specialized monitoring units, they would not remain competitive in the marketplace. They would be replaced by more efficient organizations. If an organization spends more money than it takes in, it will be forced to borrow money or raise capital to stay in business. Alternatively, it will be forced to cut spending drastically. Therefore, corporate entrepreneurs must take greater care in forecasting future market conditions than individuals do. Consumers can rely on corporate entrepreneurs to predict what things they will want to buy in the future. They can safely defer this planning process to profit-seeking businesses. This is because of the division of intellectual labor. Businesses deal with the law of large numbers. Decision-makers know more about what consumers will want than the consumers themselves do. Businesses specialize in what consumers in general want. Consumers do not.

5. Collective Spending

Organizations must spend money constantly in order to remain in business. The budgetary structure of business is much more rigorous and detailed than the budgetary structure of the vast majority of individuals. Specialized accountants collect and collate price data. They report price data in specific formats to decision-makers. Ever since the fifteenth century, profit-seeking businesses in the West have been governed by double-entry bookkeeping, which is one of the great developments of the Western world.

Spending is objective. It allocates resources in terms of an existing plan of action. Businesses focus on future consumer demand and future competition from rivals. They purchase land, labor, and capital. These decisions are based on estimations of people's future spending: customers and competitors. While these future purchases will be based on the individuals' subjective imputation of economic value, businesses and other organizations concentrate on objective prices. They do so because these objective prices are the outcome of a process of competitive objective bidding. The objectivity of the monetary bids provides accurate information to individual consumers and also decision-makers in organizations. Prices are objective. Spending is objective.

It becomes difficult for large, complex organizations to price the factors of production within the organization. *There is no system of competitive price bidding within an organization*. There is no auction process. Organizations must therefore rely on market prices generated outside the organizations. If it were not for markets, and especially capital markets, organizations would remain small and local. This is because the information within any organization is less objective than what the market provides. There is far greater subjectivity regarding wages within an organization than between organizations. There is an active labor market that allocates labor in terms of objective wages. Nothing comparable to this exists inside any large organization. This is why profit-seeking businesses sometimes find it profitable to spin off a subdivision as a separate company. Then the senior decision-makers in the original organization can decide whether to purchase particular services or products from independent suppliers. Senior managers need accurate information regarding wages, and this is available only through the auction process known as the labor market.

Inside the organization, a manager makes subjective imputations about

the productivity of specific employees under his jurisdiction. This kind of information is vital for profitable operations inside any organization. But this is not the only kind of valuable information. Decision-makers also need objective prices in order to bring a degree of market-based objectivity into the subjective process of evaluating individual performances within the organization. There is a constant trade-off between the desire to obtain accurate subjective knowledge about the organization's costs of operations vs. the desire to obtain accurate objective knowledge about the costs of operation. The latter form of knowledge is best obtained through a system of competitive pricing in an open market that is outside the legal boundaries of the organization.

This lack of objective prices inside an organization is the reason why there can never be one gigantic cartel in a free market. Rothbard explained why in his chapter on "Monopoly and Competition" in *Man, Economy, and State*. "In order to calculate the profits and losses of each branch, a firm must be able to refer its internal operations to external markets for each of the various factors and intermediate products. When any of these external markets disappears, because all are absorbed within the province of a single firm, calculability disappears, and there is no way for the firm rationally to allocate factors to that specific area. The more these limits are encroached upon, the greater and greater will be the sphere of irrationality, and the more difficult it will be to avoid losses. One big cartel would not be able rationally to allocate producers' goods at all and hence could not avoid severe losses. Consequently, it could never really be established, and, if tried, would quickly break asunder" (10:2:F).

The trade-off between subjective imputation and objective pricing keeps profit-seeking businesses under market-imposed restraints. No large company could survive if it relied exclusively on managers' subjective imputations of the economic value of its internal operations.

D. Entrepreneurship

There are many limits in life. Knowledge is the most important limit. Someone who has accurate knowledge of the future can be a successful entrepreneur or become a partner with a successful entrepreneur. Anytime that an individual possesses specialized knowledge that consumers would like to benefit from, he is in a position to become an entrepreneur.

Entrepreneurship is a topic virtually ignored by what is known as neo-

classical economics. Neoclassical economics operates in terms of a model of equilibrium. The equilibrium model assumes perfect foreknowledge. It assumes the omniscience of mankind. It is therefore an utterly useless model for understanding people's allocation of resources. This is why the Austrian school of economics is superior to neoclassical economics. The Austrian school has always focused carefully on the uncertainty of decision-making. In this, it follows the creative work of an economist whose name became associated with the Chicago school of economics, Frank H. Knight. His book was the first major exploration of uncertainty and entrepreneurship. Its title was *Risk, Uncertainty, and Profit*. It was published in 1921. Ludwig von Mises adopted this analysis in *Human Action*. He footnoted Knight's book in his discussion of entrepreneurship (XV:8, note 18)

Both Knight and Mises made the distinction between risk and profit. Risk can be analyzed mathematically. It is an aspect of the law of large numbers. It is the basis of all insurance contracts. People can hedge against unwanted outcomes in their lives of what are unpredictable events. Because insurance companies sell policies across large numbers of people in large geographical areas, they can make estimates about the statistical likelihood of specific events. Individuals acting alone cannot do this. Insurance is one of the great inventions in the history of man.

In contrast to risk is uncertainty. Here, there are no mathematical formulas. Individual entrepreneurs make forecasts about the future. Then they make plans to meet what they think will be future events. Then they must implement these plans by allocating assets which are used to purchase land, raw materials, capital goods, labor, and information. If they are successful in their forecasts, their planning, and their allocation of money, they will make profits. Consumers will buy the output of their ventures at prices that the forecasters believed consumers would pay. They bought low, and they sold high. But there are many entrepreneurs who buy high and sell low. Their forecasts are inaccurate. Their plans are not consistent with their forecasts. Unexpected events disrupt their plans. They may be inefficient in allocating resources to implement their plans. For any number of reasons, their plans go awry. They produce losses.

All of this is part of the resource allocation process. The possession of resources inevitably conveys responsibility for the profitable administration of these resources. There is no escape from entrepreneurship. The fearful steward in the parables of the talents and the minas was not psychologi-

cally or morally equipped to be an entrepreneur. He could have been an investor who put the money with money-lenders. That would have enabled him to take advantage of the law of large numbers. Bankers are in the business of converting uncertainty into risk. But the steward did not do that, either. He produced a loss for the owner of the asset. The owner therefore brought negative sanctions against him.

E. Future-Orientation

Unless somebody is spending money for immediate consumption, he is allocating money for the future. He may simply be setting aside money for future consumption, but he may also be investing money so that he will have more money in the future than he has at present. This was what the capitalist in the parables of the talents and the minas did. He transferred money to stewards. They were to act on his behalf in order to generate greater wealth when he returned. He was future-oriented.

In allocating resources for the future, each person must deal with the fact that he is responsible for the allocation of his wealth before God. He may not consider this, but he should. In any case, he is responsible in the present in a significant way compared with his responsibility in the future. He may die between now and then. Circumstances may change dramatically. So, wealth owned in the present is worth more than the same numerical wealth in the future. In allocating capital for the future, we discount the value of the expected goods in the future. They may be the same goods physically and numerically, but the value of the goods is greater in the present than the expected future value of the goods.

This is why the man in the parables of the talents and the minas was upset with the steward who buried the coin. The man told the steward he should have given it to the money-lenders. They at least would have returned a rate of interest to the steward who was acting on behalf of the owner. To return the coin to the owner was not good enough to satisfy the owner. He could have kept the coin for himself during his absence. He did not need a lazy or resentful steward to act on his behalf economically if all the steward was going to do was bury the coin. That took no skill. That took no estimation of the rate of return on the investment. The parables made it clear that the return of exactly what had been given to the steward was reprehensible performance. The steward was severely punished for his lack of entrepreneurship. He was a terrible steward. Yet he had not lost the coin. The con-

clusion is inescapable: when the businessman went on his journey, the present value of the coin was greater to him at that time than the return of the same coin in the future. That coin was worth less. The owner discounted the economic value of the coin returned to him in the future. It was the same coin physically, but it was not the same value economically to him. It was worth less. He deserved a positive rate of return to compensate him for the discount that he legitimately applied to the future value of the coin at the time when he went on his journey. [North, *Matthew*, ch. 47:D]

Therefore, allocation has to do with subjective economic value, not simply physical capital. To treat present capital identically with future capital is bad economics. It does not take into account the discount that the decision-maker applies in the present to the future value of an asset.

Conclusion

The allocation of resources is inescapable. Individuals and representative agents in institutions must decide what to do with the assets they legally control. These assets have objective prices because of the market's auction process. Consumers are constantly bidding for the output of land (raw materials), labor, and capital. Their bidding produces objective prices.

People allocate resources in terms of their hierarchy of priorities, which is subjectively determined, i.e., imputed. People are limited by the objective resources that they control and the objective circumstances that they face: money, prices, knowledge, time, and geography. To purchase an asset or an opportunity, they must surrender ownership or control over something of value in the free market. *They exchange one set of circumstances for another.* There is no escape from this process of matching subjective imputation to objective conditions. This is what the dominion covenant is all about: *the responsibility of resource allocation.* This is an inescapable implication of the biblical doctrine of stewardship. The cosmic Owner has allocated His resources to His stewards. He holds them responsible for the administration of His assets. This is an aspect of common grace. *Grace precedes law.* But law soon follows. So do objective responsibility, objective allocation, and objective judgment: profit or loss.

8

BOUNDARIES

The Lord God commanded the man, saying, "From every tree in the garden you may freely eat. But from the tree of the knowledge of good and evil you may not eat, for on the day that you eat from it, you will surely die" (Genesis 2:16–17).

You shall not take the name of the Lord your God in vain, for the Lord will not hold him guiltless who takes his name in vain (Exodus 20:7).

You shall not steal (Exodus 20:15).

Analysis

Point three of the biblical covenant model is ethics. It is associated with law. Both ethics and law have to do with boundaries. Some acts are prohibited. They have judicial boundaries around them. In the case of property, it also has judicial boundaries. It may even have physical boundaries that mark the legal boundaries. In the section on history's redemptive era, the *Student's Edition* chapter on boundaries is Chapter 13: "Leasehold." The leasehold is the document that establishes the responsibilities of the owner and the leaseholder. The model is God's leasehold with mankind.

1. Covenantal Foundations

This chapter is an extension of the third law under **judicial (theocentric) laws**: *God prohibits theft*. In Chapter 2, I wrote: "This stipulation was an aspect of point three of the biblical covenant. It placed a legal boundary around a forbidden tree. This legal boundary identified the tree as forbidden. They were not to eat from it. It did not belong to them. It belonged to God. Any violation of that boundary would result in the negative sanction of death. This stipulation is the origin of private property. It was primarily judicial in origin" (2:C:3).

This chapter is also an extension of the third law under **judicial (repre-**

sentative) laws: *trusts are binding*. In Chapter 2, I wrote: "A trust is a legal document that places legal boundaries around the use of specific pieces of property. A trust is the judicial model for all forms of private ownership. It is a legal arrangement by which an owner of property establishes a legal entity that provides benefits for named beneficiaries. The owner transfers the ownership of property to the trust. He appoints (names) a trustee to act on behalf of beneficiaries. This model for this system of property transfer is God's delegation of property to men. They hold this property in the name of God, whether or not they acknowledge this legal arrangement" (2:D:3).

This chapter is also an extension of the third law under **stewardship laws**: *ownership involves exclusion*. I wrote in Chapter 2: "God excluded Adam and Eve from access to the forbidden tree. He established a property right. There was a legal boundary around that tree. *Property rights are always about boundaries: legal, institutional, and geographical*. All legal rights are about boundaries. Owners have the right of exclusion. They have the right to use their property as they see fit, as long as it does not interfere with someone else's use of his property" (2:E:3).

2. Multiple Boundaries

The commandment against taking God's name in vain is the third in the list of God's Ten Commandments. This commandment establishes a property right in God's name. God owns His name. He has rules regarding the use of His name. This appears in the first list of five commandments, which I have called the priestly commandments. The commandment against theft is the eighth commandment. It is the third commandment in the second list of five commandments, which I call the kingly commandments. I discussed the third and eighth commandments in my commentary on the Ten Commandments, *Decalogue and Dominion*, which is the second volume in my economic commentary on the Book of Exodus.

Point three of the biblical covenant has to do with ethics. It therefore has to do with law. Law imposes boundaries: "thou shalt" and "thou shalt not." Boundaries are basic to the concept of property: "mine" and "yours." Boundaries are point three of the biblical economic covenant. This is why I selected this title for my commentary on Leviticus: *Boundaries and Dominion*. Leviticus is the third book of the Pentateuch: the first five books of the Bible.

Boundaries are associated with names and naming. God named Adam. Adam named the animals. Then Adam named Eve. A name identifies a spe-

cies or a person. The act of naming *separates* the named entity from other named or unnamed entities. That is, a name places boundaries around a person or object. A name reinforces individuality. It places boundaries around the person named. It says "this person is unique."

There is a book of life (Philippians 4:3). It is filled with names. It is the most important list in this world or outside this world.

God names people in order to identify individual responsibility. This act of naming makes someone legally responsible for his actions. Naming is therefore itself a judicial action.

When Moses asked God who he should say told him to bring the message of liberation to the Israelites, God named Himself: "I am that I am" (Exodus 3:14a). This could also be translated "I shall be what I shall be." Moses had a good reason to ask God for His name. God was asking Moses to speak covenantally in God's name. Moses wanted to know the name of the God for whom he was speaking judicially. He knew that the Israelites would demand to know. Moses needed proof that he was not speaking autonomously, i.e., on his own authority. God's answer identified Himself as autonomous, self-defined, and self-contained. Theologians call this *aseity*: self-contained. This is an incommunicable attribute of God.

A man is also bounded by other characteristics: genetic, social, historical, and covenantal. All of these features bind him. Yet this binding also provides opportunities. He is a specific person with specific abilities in a specific place at a specific time. His environment binds him, but it also empowers him. Just as a clock binds a person's day, so does it enable him to master his use of time. He is inside boundaries, but he can extend these boundaries. Boundaries are like levers. They establish some limits, but they extend boundaries of different limits.

A. Ownership and Naming

Point one: God's sovereignty. We should always begin our economic analysis with God. This methodology is theocentric. God has ownership of His name. This is because He is the cosmic Owner. He owns Himself and all of His attributes. This is the biblical doctrine of self-ownership. Original ownership applies only to God. It is an incommunicable attribute of God. As the Owner of His name, He has placed a boundary around His name. God's self-naming is the model of this relationship between name and ownership.

Name and property are linked judicially in the Decalogue, which is the most important written covenantal document in history. Private property begins with a person's name. A man is a legally identifiable agent. His name identifies him. It says, "you, not someone else." This is the basis of *judicial responsibility*. It is also the foundation of *economic authority*. This is the theological basis of the third law in the list of kingly laws: the prohibition against theft. God has delegated ownership to agents in history. They represent Him. Others are not to invade these legal boundaries.

It is legitimate to speak of a person's self-ownership as long as this is defined within the framework (boundaries) of the biblical covenant model. Self-ownership is an aspect of trusteeship: delegated legal ownership. It is also an aspect of stewardship: delegated economic authority.

As a parent, God named Adam. God requires parents to name their children. Parents are under His sovereignty. He delegates the authority to parents to name their children, but this does not revoke His position as the cosmic Namer. He gives names to all mankind, but He does so through His delegated agents. This is why God had Adam name the animals in the garden. Adam was classifying them. He was evaluating their position in the natural order. Then God gave Adam a wife. Adam named her.

The creation is finite. To master it, men must first name its parts, i.e., classify these parts. Carl Linnaeus was a Swedish biologist in the eighteenth century. He developed a system of naming that transformed the science of biology. He recognized that until we classify something by naming it, we cannot study it scientifically. We cannot grasp why it is similar to some things, yet also different—continuity and discontinuity. We must know where it fits in the grand scheme of things. The very phrase "scheme of things" implies both order and purpose.

The authority to name things is a God-given authority. The person with the authority to establish names possesses a unique hierarchical position at the top. The question, "Who's in charge here?" can be accurately answered by identifying the person with the legal authority to name people and things. The person who possesses this authority is the source of boundaries. These boundaries mark people, places, and things. The rebels at Babel announced that they would make a name for themselves (Genesis 11:4). [North, *Genesis*, ch. 19:A] When the Communists took over in Russia in October 1917, they re-named cities. They drew new maps. After the fall of the USSR in December 1991, the new rulers in Russia re-established the original

names. This was a mark of the transition out of Communism and back to a non-Communist social order. Naming is a serious business.

B. Bidding

Point two: hierarchy. Having named a person, God then delegates to him secondary ownership over himself. This applies progressively as a person moves from childhood to adulthood. Parents exercise decreasing authority. At some point, societies determine that people are adults and therefore are legally responsible for their behavior. This is basic to all social orders. A person who is responsible for his actions is legally in control of himself. A man owns himself as a steward owns other forms of property. This is not autonomous self-ownership, but it is *delegated self-ownership*. Name and property are linked legally.

Some humanistic free market economists misappropriate what is an incommunicable attribute of God. They say that each person is a self-owner. They are vague as to the degree of self-ownership. Does the state have some share of this ownership? Does the family? Anarchists go even further. They argue that each individual's self-ownership is absolute. The most prominent anarcho-capitalist theorist in the second half of the twentieth century was Murray Rothbard. In a 1982 article, "Law, Property Rights, and Air Pollution," he wrote this. "The basic axiom of libertarian political theory holds that every man is a self- owner, having absolute jurisdiction over his own body. In effect, this means that no one else may justly invade, or aggress against, another's person." This is libertarianism's non-aggression axiom, which is the supreme axiom of libertarianism. Rothbard then drew economic conclusions. "This system establishes the right of every man to his own person, the right of donation, of bequest (and, concomitantly, the right to receive the bequest or inheritance), and the right of contractual exchange of property titles." *The claim of absolute self-ownership is a conceptual act of theft*. It is a violation of God's absolute ownership claim on each person. *Absolute self-ownership divinizes the individual*. The anarchist's practical problem is that there are lots of other equally self-divinized individuals. Some of them seek power through violence. They do not honor the rights of weak competitors. They do not honor the libertarian's non-aggression axiom, which is at bottom an ethical standard: a matter of right and wrong. In the anarchist's hypothetical world, there is no higher court of appeal for the weak to appeal to for justice. There is only power. In the name of absolute

individual liberty, the anarchist's worldview produces collective power: from the bully to the gang to the criminal syndicate to the warlord to the nation-state.

The Christian view is that self-ownership is delegated by God. It is not absolute. It is bounded by law and time. It is bounded by multiple institutional hierarchies. This delegation of ownership is an aspect of the dominion covenant. In obeying it, an individual seeks to increase his ownership of goods and streams of future services. He purchases assets. *He thereby declares limited legal sovereignty over them*. This is an extension of his name. He is bounded by his name: a person legally responsible before God. He is also bounded by what he owns, beginning with himself. He extends his legal jurisdiction by accumulating property. He does this by extending his economic jurisdiction. He offers services in exchange for money. He owns these services because they are extensions of himself. Because he owns them, he can rent them. He possesses what others want. He possesses bargaining power. *His economic bargaining power is an extension of his delegated legal sovereignty*.

This raises the issue of resource allocation (category two). An individual owns a resource. He has the legal authority to decide what use is highest on his own value scale. The more versatile the asset, the greater the range of uses to which it can be put. *Money is the most marketable commodity*. This was Carl Menger's insight in 1892. It was developed in detail by Ludwig von Mises in his book, *The Theory of Money and Credit* (1912). If a resource has a price, there is demand for it. There is someone bidding for it. The owner has the economic responsibility to decide whether to sell or rent the resource to the highest bidder. If he decides not to sell or rent it, he becomes the highest bidder. This is called *reservation demand*. The owner decides what to do with the asset in terms of his *hierarchy of values*. The asset or the money it can bring can be used to do several things. The owner ranks these: first, second, or third. He then puts the asset to use.

To maximize his monetary income, he must be ready to sell an asset to the highest bidder. This allows others to register their willingness to own or rent the asset. Through competitive bidding, the owner and the would-be owners register their respective demand. The owner can refuse an offer, thereby becoming the highest bidder. But all of this is in response to the respective hierarchy of values of each bidder. The *subjective values* of the participants are manifested through a system of *objective bidding*. This es-

tablishes the free market price of the asset. The values are hierarchical and subjective. The bidding process is horizontal and objective.

The bidders are limited by the resources they own or can borrow. They make objective bids in terms of what they own and how much they are willing to surrender in order to make the purchase. Specific bidders make specific bids in terms of specific values and specific possessions. The Bible's system of private ownership allows individuals to compete for ownership of other people's resources. By specifying individuals who must make these estimates and decisions, the system of private property links responsibility to ownership. Owners make their decisions in terms of their values and their assets. *There is no way for them to separate responsibility from ownership.* The legal responsibilities of ownership are equated with the economic benefits and liabilities of ownership. The person who owns an asset bears the cost of making an allocation decision that does not maximize his income. It focuses his attention on the market for the asset. He can ignore this market, but only at a price: forfeited income.

The individual asks: "What is the benefit for me?" This has to do with ownership. In asking this, he has a personal economic incentive to pay attention to bidding for the asset. This system of competitive bidding lets a potential buyer reveal what the benefit is for the owner. When the existing owner decides there is a greater benefit for him by exchanging the asset for something else, the two owners make an exchange. Each owner believes there will be more in it for him after he makes the exchange.

Because ownership is decentralized widely to individuals, the specialized knowledge that owners possess is put to service of the others. An owner seeks ways of attaining a greater level of satisfaction from the assets he owns. To discover a way to maximize his satisfaction, he must take into consideration the objective bids of others. What they want and are willing to pay affects his ability to pursue his wants with whatever he can pay. *The greater the market value of whatever he owns, the more effectively he can pursue his own goals*. So, he seeks ways to maximize the economic value to others of the assets he owns, which includes his knowledge of specific circumstances: his circumstances and also the circumstances of others, as reflected in market prices. He can see what others are willing to pay for the assets he owns.

To increase the accuracy of his bidding, he must gain better knowledge of what others are willing and able to pay for his assets. This imposes search

costs on him. Time and searching are not free resources. The purpose of this search process is to gain greater knowledge of what others are willing to pay. As with any other asset with a price, *accurate knowledge is not a free resource*. People cannot locate it free of charge. They must search for it. They cannot initially know how much knowledge is available at a particular price. *The free market is a bidding system for accurate knowledge.* It rewards accurate knowledge. Through bidding, men call forth knowledge that would not otherwise have been available to them.

Knowledge and scarce resources are offered for sale to the highest bidders. This is the result of God's initial distribution of resources. The wealth possessed by individuals is put to the use of others. That which is *owned legally* is put to use by the *highest bidder.* (He who gains or retains ownership is the highest bidder.) No one compels others to share their knowledge, yet this knowledge is brought into the marketplace to be put to use by others. No compulsion is involved. Individuals are bounded, but through the pursuit of profit on a free market, they increase the supply of knowledge available to them. This increases their ability to conserve resources and also maximize the subjective value—objective income—of the assets they own.

C. Specialization

Point three: ethics. Law places boundaries around men. We are bounded, but this gives us opportunities to specialize. We hear of a "Renaissance man." This is someone who conforms to the Renaissance ideal of a man well-versed in many fields. But such a person always faces the problem of deciding what to specialize in. If someone can do many things well, his cost of doing one thing extremely well is high. He has so many skills that would pay well. The one that he must forego is a high-value opportunity: at the top of a long list of forfeited opportunities. His foregone opportunity is his cost. He must choose wisely. He must decide what is best for him, as well as for God and potential consumers. He needs far better judgment than most people possess.

To specialize profitably, a person must be able to say "this is mine." This applies to his work. It applies to whatever he owns and seeks to improve. Biblical law enables property owners to exclude others from their property. In real estate, this property is identified by landmarks. These landmarks identify the *legal zone of responsibility* for the use of this property. The property produces income over time in some form. The owner possesses

legal control over this stream of income. To private property are attached various legal rights, meaning above all the right to exclude. *The concept of a property right means the right to exclude—a legal immunity.* The archetype was the tree of the knowledge of good and evil in the garden. It was God's property. He did not delegate control to Adam and Eve. He excluded them (Genesis 2:17). [North, *Genesis*, ch. 9:A]

Individuals are bounded by time and place. A person is born at a time in a place. He grows up in specific places in a particular era. He becomes familiar with the boundaries of time and place as they apply to him. The narrow focus of time and place in someone's life enables him to specialize. He gains expertise in time and place.

We speak of saving time. But do we save time? There is no bank account for deposits of time. Time cannot be set aside in reserve "for a rainy day." It cannot be purchased for money in any market. Yet it can be purchased with righteousness. "If you will walk in my ways to keep my statutes and my commandments, as your father David walked, then I will lengthen your days" (I Kings 3:14). Because of this, there is the phenomenon known as *bargaining for time*. It is a common feature of the response to the news that a person is dying. He bargains with God for more time. He promises to do something important for God, as a person imagines. This is not an irrational response.

When we say that we save time, we mean this: *we achieve our goals for a reduced expenditure of time.* We allocate less time. We do this by becoming more efficient in our use of time. Time is a scarce resource. Once it passes, it is gone forever. *Time is a nonrenewable resource*. Indeed, it is the archetype of a nonrenewable resource. So, men are cautioned not to waste it. Jesus said: "We must work the works of him who sent me while it is day. Night is coming when no one will be able to work" (John 9:4). In short, we economize. But this raises the question of how to evaluate our time management objectively.

D. Profit and Loss

Point four: sanctions. In economics, sanctions mean either profit or loss. These accounting concepts are basic to the task of economizing: cutting losses and increasing profits. This procedure is basic to overcoming the limits imposed by scarcity. Scarcity is defined by economists as follows: "At zero price, there is greater demand than supply." This is another way of saying "something commands a price." *Scarcity imposes boundaries*. Because

of scarcity, men must gain control over more scarce assets in order to increase their consumption. They must extend their jurisdiction. There is also a scarcity of time. People die.

Scarcity has been cursed (Genesis 3:17–19). [North, *Genesis*, ch. 12:A, C] Therefore, it is mandatory that covenant-keepers seek to overcome scarcity progressively in history. The marks of this are rising output and falling prices. We all want to buy things cheaper. We all want more for our money. This is universal. It is not confined to covenant-keepers. So, we search for ways to reduce the cost of maintaining our lifestyles. The dominion covenant was given before the fall and the curse of the ground (place) and the curse of death (time). This covenant is still in force. The evidence that almost all mankind honors it is the universal quest for more. To gain more for ourselves, we must extend our control over more. We must subdue the earth.

Cursed scarcity is a negative sanction. To offset it, there must be positive sanctions. There must be ways of offsetting the curse. The Bible describes this in Deuteronomy 8. After describing God's miraculous intervention on behalf of the Israelites in the wilderness, Moses said this. "But you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:17–18). This teaches emphatically that an increase in wealth is a sign of the covenant. It is evidence of the covenantal structure of economics. *Positive economic sanctions confirm the covenant.* [North, *Deuteronomy*, ch. 22]

There is a long tradition for economics textbooks to begin with scarcity. This is garden-of-Eden scarcity. The most rigorous of the textbooks in the Chicago School tradition, Allen and Alchian's *University Economics* (3rd ed., 1972), may be the only textbook ever written that begins with Chapter 0: "How Much Mathematics and Graphs?" Chapter 1 is titled "Scarcity, Competitive Behavior, and Economics." It begins: "Ever since the fiasco in the Garden of Eden, most of what we get is by sweat, strain, and anxiety. Two villains—nature and other people—prevent us from getting what we want. Nature is niggardly: it provides fewer resources than we could use, and much of what is available is made useful only by hard work. As for other people, the problem stems not from malevolence: their wants and ours simply exceed what is available." Mark Skousen, a Mormon who writes from an Austrian School perspective, begins his textbook, *Economic Logic*

(3rd ed., 2009), with a discussion of Adam and Eve after their expulsion from the Garden. They had to work. So do we. This refers back to Genesis 3:17–19: the curse of the ground. Roger Leroy Miller in Chapter 1 of his textbook, *Economics Today* (8th ed., 1994), writes in the Introduction: "Economics is the study of how people make choices to satisfy their wants. Wants are defined as all the things people would consume if they had unlimited incomes." Chapter 2 is titled, "Scarcity and the World of Trade-Offs." Edwin Dolan, in his textbook, *Basic Economics* (2nd ed., 1980), titles Chapter 1, "What Economics Is All About." The first section of the chapter is "Scarcity and Choice in Economics." He writes: "In *economics*, scarcity means that people do not have as much of everything as they want." I could go on, but my time is scarce. So is yours.

Secular economists never start where the Bible starts: ownership. Why is this? The main reason is their quest for universality. Scarcity is universally recognized. It is acknowledged by every economic theory. In contrast, the question of ownership raises fundamental ethical questions. Who owns something? On what legal basis? On what moral basis? These are questions that cannot be settled by an appeal to ethically neutral logic. *This is because there is no such thing as ethically neutral logic*. But economists usually rest their case on what they assume to be ethically neutral logic. So, they begin with scarcity.

The free market's system of profit-and-loss accounting enables resource owners to deal with scarcity in a positive way. Over generations, this leads to compound economic growth. This is the connection between point four of the biblical covenant and point five.

E. Compounding

Point five: succession. In Christian economics, succession involves expansion through the generations. This expansion is an aspect of the dominion covenant: man's obligation to multiply (Genesis 1:28). This means demographic compounding. The great biblical passage on this is God's promise to Abram of heirs. "Then he brought him outside, and said, 'Look toward heaven, and number the stars, if you are able to number them.' Then he said to him, 'So will your descendants be.' He believed the Lord, and he counted it to him as righteousness" (Genesis 15:5–6). [North, *Genesis*, ch. 22]

Compounding is also known as positive feedback. Profits are reinvested. The economic base expands at an accelerating rate because the rein-

vested profits expand along with the original base. Economic growth is the result of net compound economic blessings. Positive economic sanctions overcome specific limits—boundaries—of scarcity over time. *The promise of compound economic growth is an affirmation of dominion*. When a man accumulates capital, he is better able to extend his dominion. He is also better able to put that property to whatever uses he chooses. His range of actions increases because he possesses more wealth.

This promise of economic growth was unique in the ancient world. Only the Hebrews believed that this is possible. One confirmation of God's covenant with His redeemed people is economic growth (Deuteronomy 8:17–18). This means that covenant-keepers should expect economic growth if they remain faithful. Compounding wealth is promised as a confirmation of *compounding ethical progress*, what theologians call progressive sanctification. [North, *Deuteronomy*, ch. 22]

The promise of compound economic growth was a promise to individuals and institutions that comprised the covenantal community. The promise had to do with individual progressive ethical sanctification: *adherence to biblical law*. Progressive ethical sanctification is rewarded with greater wealth: a reduction of the boundaries imposed by scarcity. This in turn produces national wealth by means of a greater division of labor.

Economic growth is biblically normative. In no other ancient religion was economic growth normative. This outlook was unique to the Hebrews. It could exist only because of the biblical concept of time: creation, fall, and redemption. In the biblical account, history is linear. All rival outlooks in the ancient world were cyclical. In a cyclical universe, all progress is either temporary or an illusion. But, in the biblical worldview, because individual progress is at bottom ethical, and because there are positive economic sanctions for personal ethical progress, long-term economic growth is a real possibility. There is no biblical theory of inevitable *ethical* reversion to the mean. There can be permanent ethical progress. There is also a clear doctrine of *covenantal inheritance*. This applies to both ethics and capital. Inter-generational ethical progress is possible. Therefore, so is compound economic growth.

Deuteronomy 8:17 warns against attributing economic growth to autonomous man. This is the essence of ethical rebellion: using the fruits of the covenant to praise autonomous individual productivity or even corporate productivity. But the very possibility of ethical rebellion points to the

possibility of long-term ethical progress. Temptation need not be submitted to. "No temptation has overtaken you that is not common to all humanity. Instead, God is faithful. He will not let you be tempted beyond your ability. With the temptation he will also provide the way of escape, so that you may be able to endure it" (I Corinthians 10:13). There is nothing inevitable about a reversion to the status quo ante, either ethically or economically.

Conclusion

The Third Commandment, which announces God's rule regarding His name—an exclusion law—is law three in the list of five priestly laws. The eighth commandment protects property from theft: another exclusion law. It is third in the kingly list of laws. *Name and property are linked covenantally.*

God delegates to parents the legal authority to name their children. When a person reaches adulthood, he becomes a legally responsible agent. He has a name. He has an identity. This legal authority under God is also economic authority. The person is legally responsible primarily to God and secondarily to other people. This includes economic responsibility. By tying legal authority to economic authority by means of private ownership, God establishes a comprehensive system of responsibility. Property rights are ultimately legal categories. Only secondarily are they economic categories. In short, *covenantal authority is superior to economic authority.*

The libertarian doctrine of absolute self-ownership as the foundation of property rights rests on the false doctrine of man's autonomy. The concept of self-ownership is legitimate in this sense: *self-ownership is delegated ownership.* All ownership is delegated ownership. Ownership by legal adults begins with delegated self-ownership. The individual is owned by God, not by the state. The adult individual is owned by God, not by the family, until such time as an individual marries. At that point, mutual ownership and obligations begin (I Corinthians 7:3). Each partner has legal claims on the other.

Trusteeship (point two) by specific individuals (point three) over specific assets (point three) in terms of fundamental law (point three) is the foundation of property rights. A trustee acts as the legal agent of the owner. He defends the owner's assets from unauthorized use by interlopers, who either assert a superior claim of ownership or else steal it. In doing so, he inescapably acts also as an economic agent of the owner. He must consider objective bids for ownership from other stewards of the same owner. These other stewards may not acknowledge their position as legal and economic

agents of the owner. They may assert their ownership of their very being—their "name" in the broadest sense. They may assert an autonomous legal claim over the goods under their administration. But this does not change the covenantal structure of ownership.

9

IMPUTATION

And God saw everything that he had made, and behold, it was very good. And there was evening and there was morning, the sixth day (Genesis 1:31).

Woe to those who call evil good and good evil, who put darkness for light and light for darkness, who put bitter for sweet and sweet for bitter! (Isaiah 5:20).

Analysis

These passages have to do with casuistry: the application of general standards to specific historical cases. This is the essence of exercising judgment. With respect to economics, the entrepreneur imputes economic value to resources he possesses or can purchase. He compares their value today with the discounted value of his expected output from these resources in the future. He decides whether to buy or rent these resources in order to rework them into goods and services desired by future consumers. Entrepreneurship begins with the entrepreneur's imputation of economic value.

1. Covenantal Foundations

This chapter is an extension of the fourth law under **judicial (theocentric) laws**: *God evaluates performance*. In Chapter 2, I wrote: "God sits on the throne of judgment (Revelation 20:11–15). Jesus sits at His right hand (I Peter 3:21–22). This is a judicial matter: God's high court. God declares men's guilt or innocence. Theologians call this judicial declaration imputation. But the concept of imputation applies to more than judicial performance. It applies to economic performance, aesthetic performance, and all other kinds of performance. God's imputation is authoritative. There is no appeal beyond it" (2:C:4).

This chapter is also an extension of the fourth law of **judicial (representative) laws:** *trustees are accountable*. In Chapter 2, I wrote: "God holds

owners accountable in the broadest sense: morally, legally, confessionally, and economically. They will give an account of their trusteeship at the final judgment. They must act as intermediaries between God and His property. They must evaluate their administration of God's property in terms of God's ethical and legal standards. They must think God's thoughts after him. What God judicially declares—imputes—they must impute. Whatever God imputes economic value to, they must impute economic value to" (2:D:4).

This chapter is also an extension of the fourth law under **stewardship laws**: *owners evaluate performance*. In Chapter 2, I wrote: "This is an extension of the fourth law of the theocentric judicial covenant: God evaluates performance. Delegated owners also evaluate performance. They are supposed to evaluate performance in terms of the criteria established by God. They impute economic value because they are made in the image of God. They are able to do this because God does this. They are stewards of God's property, so they have to be able to evaluate performance. *They do as creatures what God does as Creator.* They are supposed to think God's thoughts after Him. They can do this self-consciously as stewards of the Creator God, or else they can do it as implicit stewards of some other god. This other god may be the state. It may be the free market. Ultimately, a self-proclaimed autonomous man serves himself as god" (2:E:4).

2. Judicial Imputation

God announced the quality of His work at the end of every day except day two of the creation week. He declared His satisfaction. This is the most important biblical example of imputation: assessing historical change by means of fixed standards. God evaluates. He declares His assessment. This is what He will do at the final judgment. All of history is marked by God's constant assessments in terms of His law. He then imposes blessings and cursings in terms of His assessments (Leviticus 26; Deuteronomy 28).

As God's judicial and economic agents, we are required by God to make similar assessments, i.e., imputations. We are to make similar declarations. We are to impose blessings and cursings. We are to use His law as our guide. Those who declare the opposite come under God's judgment, Isaiah said.

Point four of the biblical covenant is sanctions. Sanctions are an aspect of God's supreme court. God applies fixed biblical laws to specific judicial cases. This requires the exercise of judgment. God then announces "guilty"

or "not guilty." Then He imposes sanctions: positive or negative. To impute is to render judgment: point four of the biblical covenant.

In Calvinist theology, the doctrine of imputation refers to God's declaration of the guilt or innocence of individuals. It is a judicial act, also called a forensic act. This doctrine plays a unique role in Calvinist theology. It is less important in other theological systems. God is seen as a judge. He imputes Adam's sin to all humanity. He applies an ethical standard to all humanity: the perfect humanity of Jesus Christ. Christ's perfection is assessed in terms of His conformity to God's law. God assesses all individual ethical performance in terms of this standard. This is the model of all casuistry: the application of God's law to historical circumstances. God does this. As creatures made in God's image, so must human beings. Imputation has to do with judicial categories: saved and lost, redeemed and unredeemed. But this concept is not confined to the judicial category of justification. It is also the model for the ethical category of sanctification: the degree of ethical conformity to God's law. Justification has to do with declaring saved or lost: the ultimate pass-fail final examination. Sanctification has to do with grading on a curve: the degree of individual conformity in history to a fixed ethical standard that was attained by Jesus Christ. It also applies to human institutions: corporate sanctification.

A. Valuation by God

Point one: God's sovereignty. He is the Creator. He is also the Imputer. He evaluated the quality of His work at the end of each of five of the six days (Genesis 1). On what basis? First, He had spoken the day's work of creation into existence. Second, the creation was objectively real. It was capable of being catalogued, measured, and evaluated. Third, He implemented the creation in terms of pre-creation standards. We presume this, i.e., that God did not make things up as He went along. The New Testament adds that the Second Person of the Trinity was the executor. "For by him all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and for him" (Colossians 1:16). Then He evaluated this work in terms of the faithfulness of the creation to His sovereign creative word.

There are no actions beyond the judgment of God. God evaluates every action. Then He renders judgment. An action is either good or bad. The final judgment will be the overall retroactive assessment (Matthew 25:31–42).

This does not mean that God makes no further judgments from the end of the week of creation until the final judgment. *God renders constant judgments*. He evaluates constantly, just as He evaluated each day of creation. This is the archetype for man's rendering of judgment. Man is made in the image of God. This means individual men and corporate man. Individuals are under a covenantal administration, but so are collectives. Individuals are subject to eternal sanctions. No covenantal institution other than the church extends into eternity. Individuals are given the ability to make judgments as judicial agents of God. This ability is built into man's very being. Declaring and executing judgment are aspects of the dominion covenant.

The philosophical dualism between hypothetically unchanging logic and ceaseless change—Parmenides vs. Heraclitus—is resolved biblically by means of a doctrine that is based on metaphysics: *the absolute sovereignty of God over His creation*. This doctrine affirms both His omniscience and His omnipotence. He has laid down His law. All of the creation is under God's providence, from subatomic particles (or are they waves?) outward to a hundred billion galaxies (or maybe two billion) with a hundred billion stars each. *There is predictability in history because God is sovereign over history*. He governs the creation. But in one tiny location in the universe, the earth, His providence is seen in linear history: creation, fall, incarnation, redemption, and final judgment. Here, the issues of history are ethical—not mechanical and not organic.

The universe is subject to laws. Because men are required by God to exercise dominion, they have been given minds that can render judgments. They can perform the art of casuistry: the application of ethical principles to historical cases. They can also do science: discover laws of nature, and then use these laws to exercise power over nature. *What God does originally, men can and must do secondarily and analogically*. This two-fold ability of *comprehension and application* is objectively inherent in men. God created men to do this on His behalf. The concept of "on His behalf" leads to point two of the biblical covenant: representation.

B. Valuation by Man

Point two: hierarchy. Each individual is under God. This is a judicial matter. He is under God's Bible-revealed law. He acts as a steward under God-delegated ownership. He is required to rule over creation by means of God's law, which includes the predictable regularities of nature. So, hierar-

chy, law, judgment, and inheritance are all part of an integrated system. The sovereignty of God is the foundation of this system.

1. The Image of God

Each person is made in the image of God. So is corporate mankind. So, each person is responsible for the administration of assets delegated by God. This means that the decision-maker is *responsible upward* to God. But, because the creation is under man, each person is *responsible downward*: to serve as God's representative agent. Each person is *responsible outward* to other people, who also have their God-given tasks. This is the covenantal foundation of the division of labor. Finally, each person is *responsible inward*: conscience. The person seeks his own goals. He reaps rewards and pays costs.

This is the basis of Christ's warning to count the costs when making plans. We must guess what the objective results of our plans will be. Then we must estimate the net increase in subjective economic value. This is the art of looking into the future, and then estimating retroactively what the outcomes of our plans will be. This means counting the costs, which Jesus requires us to do (Luke 14:28–32). [North, *Luke*, ch. 35]

Man is made in God's image. He is required by God to imitate God, but as a creature. The phrase "thinking God's thoughts after Him" applies to all casuistry: the interpretation of historical events in terms of God's law. This ability is the covenantal basis of casuistry. How can covenant-keepers do this? By the mind of Christ. The One who is spiritual judges all things, but He is not subject to the judgment of others. "For who can know the mind of the Lord, that he can instruct him? But we have the mind of Christ" (I Corinthians 2:15–16). [North, *First Corinthians*, ch. 2]

2. Menger on Imputed Value

The doctrine of imputation is also central to modern economic theory. Indeed, it is the identifying mark of the transition from classical economics to modern economics. The epistemological revolution in economic theory that took place in the first three years of the 1870s was developed most cogently by Carl Menger in 1871 in *Principles of Economics*. Menger rejected the classical economists' mutually self-contradictory explanations of economic value: the labor theory of value and the cost-of-production theory of value. Menger argued that economic value is imputed by final customers.

They decide which goods and services are highest on their scale of values. Then they bid for ownership in the market place. These competitive bids establish market prices, which are the objective manifestation of imputed subjective value. Imputed value and objective price are linked by way of the free market's auction process.

Why does a capital good possess economic value? Menger called this a *higher-order good*. He denied that this value is the product of the price of prior inputs. A capital good is valuable—commands a price—only because of entrepreneurs' expectations regarding the future value of consumer goods: goods that customers will pay for. He called these lower-order goods. He wrote in *Principles*: ". . . the *economic character of goods of higher order depends upon the economic character of the goods of lower order for whose production they serve*. In other words, no good of higher order can attain economic character or maintain it unless it is suitable for the production of some economic good of lower order" (II:3:D). He made it clear that expectations are the key. "We therefore have the principle that the value of goods of a higher order is dependent upon the expected value of the goods of a lower order they serve to produce" (III:3:A).

There is no objective economic value, he concluded. "The value of goods arises from their relationship to our needs, and is not inherent in the goods themselves" (III:1). Therefore, he wrote,

> It is a judgment economizing men make about the importance of the goods at their disposal for the maintenance of their lives and well being. Hence value does not exist outside the consciousness of men. It is, therefore, also quite erroneous to call a good that has value to economizing individuals a "value," or for economists to speak of "values" as of independent real things, and to objectify value in this way. For the entities that exist objectively are always only particular things or quantities of things, and their value is something fundamentally different from the things themselves; it is a judgment made by economizing individuals about the importance their command of the things has for the maintenance of their lives and well being. Objectification of the value of goods, which is entirely *subjective* in nature, has nevertheless contributed very greatly to confusion about the basic principles of our science (III:1, final paragraph).

Philosophically, this position rests on nominalism: the power of a person to name, classify, and evaluate. This position rejects realism: value or characteristics that are inherent in a physical object. This debate is as old as philosophy. As I have written, biblical thought is based on a rejection of both autonomous realism and autonomous nominalism. Biblical thought rests on covenatalism. There is *covenantal realism*, because God created everything. The creation is objective. It objectively reflects the handiwork of God. There is *covenantal nominalism*, because God imputes meaning and value to His creation. This includes economic value. In contrast to biblical thought, Menger held to the autonomy of the creation and the autonomy of man. He therefore self-consciously adopted nominalism.

> Just as a penetrating investigation of mental processes makes the cognition of external things appear to be merely our consciousness of the impressions made by the external things upon our persons, and thus, in the final analysis, merely the cognition of states of our own persons, so too, in the final analysis, is the importance that we attribute to things of the external world only an outflow of the importance to us of our continued existence and development (life and wellbeing). Value is therefore nothing inherent in goods, no property of them, but merely the importance that we first attribute to the satisfaction of our needs, that is, to our lives and well being, and in consequence carry over to economic goods as the exclusive causes of the satisfaction of our needs (III:1).

Modern economic thought is officially nominalistic. But there is no escape from covenantal realism: the doctrine of original creation by God. Humanists who defend realism do not accept covenantal realism, so they adopt autonomous philosophical realism. They sneak philosophical realism through the methodological back door of price indexes and other statistical techniques of aggregation. These indexes require the aggregation of subjective economic value—individuals' subjective imputations—which cannot be done without violating the principle of subjectivism-nominalism. *All economic policy-making necessarily rests on an implicit denial of nominalism*, for it relies on the assumption that an economist can make objectively valid interpersonal comparisons of subjective utility. So, there is an inherent dualism in humanistic economic thought.

C. Criteria: Individual and Corporate

Point three: ethics. This is related to law. There are laws governing economic value. These are to help us in formulating plans. The crucial criterion of economic value is simple: *the extension of the kingdom of God in history*. Covenant-keepers are supposed to honor this principle. "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). [North, *Matthew*, ch. 15] In contrast, covenant-breakers seek to extend the kingdom of man.

1. The Kingdom of God

The doctrine of the final judgment has an inescapable economic implication: *kingdom competition is zero-sum*. Everything built up in history for the kingdom of man is transferred to the kingdom of God at the final judgment. This inheritance is individual. It begins in history at the time of each covenant-keeper's transition from wrath to grace at conversion. This inheritance is primarily judicial: *legal status before God*. It is definitive. The person gains a legal share of the inheritance of the kingdom of God. But definitive inheritance is not final inheritance. History is a matter of progressive inheritance (I Corinthians 3). [North, *First Corinthians*, ch. 3] It builds up over time. Both the kingdom of God and the kingdom of man can expand their capital bases. One is wood, hay, and stubble. The other is gold, silver, and precious stones (I Corinthians 3:12). This is made public by *God's retroactive final judgment*, but it is imputed by God through history. With respect to eternity, the wealth of the sinner is laid up for the just (Proverbs 13:22). [North, *Proverbs*, ch. 41] Postmillennialism teaches that this transfer will begin in history, and this will accelerate as we approach the final judgment. Amillennialism denies this. Premillennialism denies it with respect to the era we live in, meaning prior to Christ's bodily return to set up a thousand-year kingdom.

So, the mutual benefits that market transactions offer are limited to history. Ultimately, this mutuality will prove to have been an illusion for covenant-breakers. Life really is a zero-sum competition. Winners take all. More to the point, winners are awarded all by God.

What has value? Anything that can extend the kingdom of God. But this implies that there must be standards of action. These standards are based on the law of God. They are an ethical extension of His character. He

pronounced His work "good" at the end of five of the six days of creation. But this implies the existence of a standard of both process and final output. There was an appropriate means to achieve the end. *The legitimacy of the end is the justification of the process*. It shapes the theory of the process. The process then either conforms or fails to conform to the standard.

2. Identifying the Standard

This raises a question. How are we to discover the standard? The Bible has two legal concepts: the *spirit of the law* and the *letter of the law*. The two are consistent in the mind of God. They are also consistent in the work of God. Paul contrasted them in operation. "But now we have been released from the law. We have died to that by which we were held. This is so that we might serve in newness of the Spirit, and not in oldness of the letter" (Romans 7:6). The letter of the Mosaic law kills. The Holy Spirit of God renews it in the lives of individuals and institutions. This is a basic theme in the epistle to the Romans.

There is an inherent dualism in all autonomous thought between the letter of the law and its spirit. The conflict comes when explaining how the letter reflects the spirit and implements it. There is a conflict between them. A rigorous enforcement of the letter of the law—legalism—can undermine the original intent of the lawmakers. The most famous case in the Bible is Darius' imprisonment of Daniel in the lion's den. The king had been tricked by his counselors into issuing a decree regulating prayer. He could not break his own words (Daniel 6:14–17). The letter of the law was opposed to the spirit of the law. Another famous incident was the deception of the Israelites by the Gibeonites. The leaders of Israel were deceived. They verbally granted the Gibeonites' safety, not knowing the Gibeonites were dwellers in the land. Joshua allowed the decision to stand (Joshua 9). He defended the letter of the law against the spirit of the law. Another famous incident was Solomon's decision to execute his half brother Adonijah, despite Solomon's promise to his own mother (I Kings 2:13–25). He defended the spirit of the law—the orderly transfer of the kingly inheritance—against the implications of the letter of the law: an unlawful transfer of this inheritance.

The criteria of *ethical* value are ethical: the spirit of the law. But they are also *judicial*: the letter of the law. The letter of the law preserves predictability of the courts. It makes judges less arbitrary. The spirit of the law up-

holds justice. It defends what is *ethically right*, not what is *procedurally predictable*. God enables the mind of man to choose an ethical path of justice without destroying predictability. But sometimes men fail.

A popular phrase is this: "What would Jesus do?" It is clear from the Gospel of John that Jesus confused most of those around Him most of the time. They constantly drew incorrect conclusions about what Jesus wanted to do or was going to do.

3. Permanent Standards

God's standards are permanent ethically. They persevere through time. This is the challenge in every judicial and ethical system. The permanence and the applicability of impersonal, autonomous logic (Parmenides), despite the flux of autonomous history (Heraclitus) must be explained by the defenders of every legal or ethical system. Biblically, the answer is the doctrine of God's permanence. "'Then I will approach you for judgment. I will quickly become a witness against the sorcerers, the adulterers, the false witnesses, and against those who oppress the hired worker in his wages, those who oppress the widow and the fatherless, against those who turn away the foreigner, and against those who do not honor me,' says the Lord of hosts" (Malachi 3:5–6). Consider Psalm 119, which is devoted to the benefits of biblical law.

> Lord, your word stands forever; your word is established firmly in heaven. Your faithfulness lasts for all generations; you have established the earth, and it remains. All things continue to this day, just as you said in your righteous decrees, for all things are your servants. (vv. 89–91).
>
> Your commandments make me wiser than my enemies, for your commandments are always with me. I have more understanding than all my teachers, for I meditate on your covenant decrees. I understand more than those older than I am; this is because I have kept your instructions. (vv. 98–100).
>
> Seven times a day I praise you because of your righteous decrees. Great peace they have, those who love your law; nothing makes them stumble. I hope for your salvation, Lord, and I obey your commandments. I observe your solemn commands, and I love

> them greatly. I keep your instructions and your solemn commands, for you are aware of everything I do (vv. 164–68).

Biblical law is the God-given, God-mandated means by which all men are required by God to order their scale of values and their lives. By means of biblical law, all men are required to subdue the earth. By means of biblical law, all men are supposed to evaluate decisions and render judgment.

Biblical law applies to individuals and collectives. Both are under biblical law's historical sanctions. This is true of collectives, contrary to libertarian social theory (Deuteronomy 28). A collective is under temporal sanctions, but not under eternal sanctions. *Eternity trumps time.* So, the temporal realm of personal sanctions elevates individualism over collectivism in history, but not in all cases. With respect to history, the collective is sometimes more important: the survival of nation, family, and church. Individuals often sacrifice their temporal interests for the sake of these larger interests. In doing so, they gain positive sanctions in eternity. Their inheritance (point five) is beyond the grave. "Do not store up for yourselves treasures on the earth, where moth and rust destroy, and where thieves break in and steal. Instead, store up for yourselves treasures in heaven, where neither moth nor rust destroys, and where thieves do not break in and steal. For where your treasure is, there will your heart be also" (Matthew 6:19–21). [North, *Matthew*, ch. 13]

Ethical value is the foundation of economic value. This conclusion opposes modern economic theory all the way back to the mercantilists. Not only is economic theory not value-free, contrary to what economists insist, it is *value-derived.* The very concept of economic value is undergirded by the concept of ethical value: extending the kingdom of God in history. There is nothing ethically neutral about economic theory.

D. Value and Price

Point four: sanctions. This is associated with imputation: judging events in terms of biblical law. The covenant-keeper is required by God to apply God's Bible-revealed law to the decision-making processes in his life. He is under God's authority (point two). His obedience is possible only because he possesses the ability to understand both the law and historical circumstances. He can accurately assess and then apply God's specific laws to historical circumstances (point four). Because of this ability, he can as-

sess the economic value of opportunities, which include multiple uses for capital. He can understand the hierarchy of values in terms of available opportunities. He can also understand God's hierarchy of values. He is required to adopt God's hierarchy of values rather than his own.

1. Economic Value: Subjective and Objective

Economic valuation is subjective in the sense that God is a person who evaluates things and relationships in terms of their potential uses. God declares specific economic value in terms of an asset's comparative importance in the building of God's kingdom in history. The human evaluator is also a person. He is supposed to make his evaluation in terms of the same goal: building the kingdom of God in history. Economic value is inherent in the relationships that exist among imputing agents in a world of scarcity and alternative uses. These relationships may have value in terms of building the kingdom of God. But they may have value in terms of building the kingdom of man. There is therefore competition over the authority of rival economic value systems in history. Biblical economics teaches that economic value is imputed by God (point four), and therefore economic value is subjective. But economic value is also objective. It is objective because human imputations are the outcome of God's objective providence (omnipotence) and the objectivity in history of His original imputation (omniscience).

Christian economists must defend both the doctrine of subjective economic value and the doctrine of objective economic value. Both aspects of economic value must be seen covenantally, not autonomously. In contrast, humanistic free market economists assert that there is only subjective economic value, but then they smuggle in objective economic value through the methodological back doors of statistical aggregation and policy recommendations. To do this, they must assert, either explicitly or implicitly, their ability to make interpersonal comparisons of subjective utility, which is impossible if utility is only subjective.

Imputation is the source of all value, including economic value. A person declares value. This need not be verbal. It rarely is verbal. He *evaluates*. This verb points to the underlying action: *to assess value*. He considers his circumstances. These include opportunities. He assesses the competing bids—prices—for temporary control of scarce resources. This tells him what others think specific assets are worth. He may decide to bid higher. This does not mean that he subjectively values ownership of the asset more than oth-

ers do. He may value it as hardly worth anything, but his wealth enables him to bid far more than competitors do. We cannot measure subjective value. We can measure objective bids. *Monetary high bid wins.*

2. High Bid Wins

A little-known example in the Bible makes this clearer. David's first wife Michal later was given by her father Saul to another man (I Samuel 25:44). David in the meantime married lots of wives. After Saul's death, when David was king, he demanded the return of Michal. Abner, who had served Saul, now wanted to serve David. David told him that this would not be possible unless Abner returned Michal to him. Abner told the second husband to surrender his wife. "Her husband went with her, weeping as he went, and followed her to Bahurim. Then Abner said to him, 'Return home now.' So he returned" (II Samuel 3:16). From what we can determine by her second husband's demonstrated sadness at losing her, he loved her more than David did. But David's high bid won. "Your wife or your life."

Humanistic economics cannot scientifically resolve the ancient question of the relationship between economic value (subjective) and price (objective). To do so, a humanistic economist would have to give an account of the origin of economic value in terms of subjective imputation, yet also connect this imputation with objective prices. But he cannot scientifically make interpersonal comparisons of subjective utility. So, he cannot say scientifically that the person who values a scarce resource more highly than other bidders do is the bidder who pays the highest price. There may be little relationship between the comparative "height" of the value scale of the winning bidder vs. those of rival bidders. All that the humanistic economist can say scientifically is this: (1) ownership of this asset was highest on the buyer's scale of values for this particular purchase; (2) ownership of this asset was highest on the individual scales of rival bidders for that particular purchase; (3) the highest bidder won. As with Michal's second husband, a losing bidder may have wanted that item more than anything except life itself. He lost it because his was not the highest bid.

Because of the epistemological separation of value and price in humanistic economics, critics of the free market argue that the rich man who can out-bid a poor man has an unfair advantage. The poor man needs an item more, the interventionist insists. The poor man values it more. He just cannot afford to bid more. The interventionist rejects any suggestion that the

allocation of wealth established by the free market is morally correct or even desirable. This allocation lacks legitimacy, he says.

This places the humanistic defender of free market allocation at a rhetorical disadvantage. He insists that economics is value-free. He refuses to invoke morality. He thereby concedes the moral high ground to the critics of capitalism because he denies that there is any moral ground in economic theory. The public thinks otherwise. The public knows instinctively that ethical neutrality is a myth in social affairs. So, humanistic free market economists have always had a problem persuading the public of the benefits of an unhampered free market. The public wants moral reasons for accepting any explanation of economic cause and effect. The humanistic free market economist refuses to provide any moral explanations. He thinks he occupies the epistemological high ground, assuming he thinks about epistemology at all. The public does not care about academic epistemology. It cares about justice.

Critics of the free market insist that they are calling for economic justice when they demand state intervention. The Bible rejects the claims of these critics, who insist that they come in the name of a higher morality with a call to redistribute wealth by civil law. To redistribute wealth, politicians and bureaucrats must violate property rights assigned by God. But free market economists refuse to challenge the claims of the critics in the name of a higher moral law. By refusing to invoke morality, they surrender the political confrontation to interventionists. The public is more impressed by an appeal to a false morality than an appeal to economic efficiency.

3. Humanism's Dilemma: A Dialogue

Economists ask a crucial question: "What is the logical relationship between value and price?" For over two centuries, generations of economists have attempted to discover the answer, and it eludes them today as much as it did in the days of Adam Smith. The difference is, today the lack of any internally consistent answer is covered by far more layers of logical dead ends that were (and are still) described as successful solutions to the problem. Is value exclusively objective, also known as intrinsic? Or is value exclusively subjective, also known as imputed? The reason why I use the adjective exclusively is because humanistic economic theory has yet to show how value can be both subjective and objective. This dualism goes back to the same either/or exclusivity in Greek philosophy. The Greek philosophers

asked: "Is an action morally good because of its intrinsic goodness or because either society or individuals say that it is good?" They never did answer this to each other's satisfaction. It is still a dividing issue in ethics. In medieval philosophy, this dualism was manifested in the battle over realism (intrinsic) and nominalism (imputed). Let us begin the inquiry.

Assume that you are interrogating a humanistic economist. You ask: *If all economic value is objective, then why do prices keep changing? What is it that makes them change?* The economist answers: "Supply and demand change." You then ask: *But why does supply change?* He answers: "In response to changes in demand." *But why does demand change?* "Because people change their minds." *Why?* "Because prices change." *Why do prices change?* "Changing supply and demand."

You see what is going on. *We are going in circles. We had better talk about demand apart from price.* "Sorry; you are not allowed to talk about demand apart from price, or price apart from demand." *All right, let me ask this: If the people change their minds about economic value because of changes in demand, then isn't the price of everything really based on subjective value?* "Yes, that is correct." *Personal subjective value?* "Yes, that is correct." *But how is personal subjective value translated into objective value?* "It isn't; there is no objective value." *Well, then, how is personal subjective value translated into objective prices?* "Through competitive bidding."

You raise a new question: value to society. *How can we be sure that the outcome of the objective individual bids reflects the true value to society?* "By denying that there is any true value to society apart from the outcome of the objective individual bids." *But what if society disagrees?* "There is no such thing as society; there are only individuals." *But what if individuals vote to change the outcome?* "That is their legal privilege in a democracy." *Are you saying that democracy is a valid way to achieve social goals?* "I am an economist; I can only tell you the outcome of events, given certain causes." *Should democracies vote to change the outcome of the bids?* "I am an economist; there is no ultimate 'should' for an economist."

Now you go for the kill. *Then what is the value of economics?* "Sorry; economics does not objectively exist; only economists exist." *What is an economist?* "An economist is someone who does economics." *Then what is the value of an economist?* "That must be determined subjectively." *Then what is the price of an economist?* "All the market will bear." *Are we paying economists too much?* "The free market will decide that." *Do we have a free*

market in economists today? "I'd prefer not to say; I might get fired. I work for a state university. It is not in my self interest to answer your question."

In my view, the answer is clear: yes, we are paying humanistic economists too much. Is my view correct? Keep reading.

E. Value-Added Living

Point five: succession. Jesus said: "The thief does not come if he would not steal and kill and destroy. I have come so that they will have life and have it abundantly" (John 10:10). This applies to every Christian. It applies to all Christian covenantal institutions. This principle applies to kingdom expansion.

The adjective "value-added" refers to increased value as perceived by economic actors. They can consume more than they did before (at the same price). They can also save more (at the same price). *More is better than less at the same price.* Maybe they will do both: consume more and save more.

1. Objective Perception

Can economic value be measured? This is one of the most divisive questions in economic theory. How can economic value be measured in an individual's self-assessment? He cannot measure it. There are no objective units. Therefore, there is no cardinal measurement. There are only comparative assessments: more, less, or the same. These are ordinal, not cardinal. When your wife asks you how much you love her, say "a lot." Do not say, "Compared to whom?" I hope this is obvious. (This should be obvious.) Next, if she says, "how much is a lot?" you are getting into a danger zone. You have already closed off the ordinal response: "Compared to whom?" But there are no cardinal units of measurement.

Can collective economic value be measured statistically? If not, then what is the meaning of the Gross Domestic Product statistic? If it can be measured statistically, on what basis can anyone defend this assertion? If we cannot measure our own individual improved conditions by a unit of measurement, how can statisticians measure the increased economic value of a nation's resources? Is economic value being added to the nation? How can we know?

As the expansion of God's kingdom in history renders the reign of sin less extensive, God's economic valuations will increasingly shape the array of objective prices as His kingdom expands. More people will think God's

thoughts after Him, and act accordingly. Their subjective valuations and their objective bidding will produce objective prices that are more in conformity to what economic value would be in a sin-free world.

As history moves toward the final judgment, the prices of all scarce resources will come closer to what they would be in a world without sin. This will not be a world without scarcity. Scarcity is not the product of sin, even though *cursed* scarcity is (Genesis 3:17–19). [North, *Genesis*, ch. 12] There still will be allocation decisions in eternity. Time will still be sequential. A person can be in only one place at one point in time. No created being will ever be omniscient, omnipotent, or omnipresent. These are incommunicable attributes of God.

2. Ideal Prices

Every system of economic theory has a concept of ideal prices. Academic economists use this concept as a way to explain pricing in the real world. It is a pricing system that would exist if there were no uncertainty. These would be prices that would prevail under conditions of universal human omniscience: no profits and no losses. This is an unrealistic assumption theologically, because omniscience is not a communicable attribute of God. The assumption of omniscience leads to an inescapable conclusion in economic theory: *money prices would cease to exist*. If everyone were omniscient, there would be no need for money. In a world of omniscient decision-makers, there would be no uncertainty. Money evolves only because there is uncertainty. People hold money—the most marketable commodity—in order to reduce their uncertainty about future exchanges. Without money, there would be no money prices. So, there could be no money-based prices in a world of equilibrium. *The very concept of an equilibrium price is self-contradictory*. I developed this idea in Chapter 54 of the *Teacher's Edition*. Therefore, the use of equilibrium prices to explain pricing in a world of uncertainty is illogical. It literally makes no sense. Yet I have never seen this obvious implication of omniscience discussed in any economics textbook or treatise, other than my own.

In contrast to omniscience, sin-free living is a communicable attribute. The proof of this is Jesus Christ, who was fully human and also sin-free. There will be prices in the new heaven and the new earth. There will be scarcity. There will be uncertainty. There will be money. There will be allocation decisions. But there will not be sin.

As people's decisions conform more closely to the economic laws of God, there will be reduced waste. There will be ever-growing accurate knowledge. There will be compound economic growth. In short, *there will be added economic value*. This is an ethical requirement, according to Deuteronomy 8:18. "But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today." Wealth is a form of covenantal confirmation of widespread obedience to the ethical terms of the covenant. [North, *Deuteronomy*, ch. 22]

3. Imputed Wealth and the Image of God

Deuteronomy 8:18 offers the promised sanction of increased corporate wealth for a covenant-keeping nation. There must be ways for citizens to see if the promise is being fulfilled. Otherwise, the promise was empty: unperceived sanctions. So, the concept of wealth is *objective*, in that it can be *measured*. It is also *subjective*, in that it can be *perceived*. So, in Christian economic theory, increased wealth is a legitimate goal and also a perceivable goal.

There are various statistical measures of increased wealth. All are faulty, in that their defenders cannot give an account of how these measures work in a world of competing subjective values, which change. Because man is made in God's image, God's imputation of increasing objective wealth can be perceived by mankind. *There is a point of contact between God and man: the image of God in man*. So, there is a point of contact between God's imputed economic value and man's imputed economic value. There is no way for self-proclaimed autonomous economists to defend their position in terms of their theory of purely subjective economic value, but a Christian can defend his position. It is internally consistent, although incomplete.

There is no need to seek perfection in establishing the relationship between a statistical theorem (Parmenides) and historical changes in both subjective and corporate value rankings over time (Heraclitus). As we say in America, "it's close enough for government work." Statistical sampling to estimate GDP is government work, in fact, although not in theory.

A rate of 2% per year per capita compound growth is not perceivable day to day or even year to year. But it has been perceivable decade to decade ever since 1800. *Compound growth changes everything*, as we have learned since 1800.

Conclusion

The main differences between modern free market economic theory and Adam Smith's economics are these: (1) the substitution of philosophical nominalism-subjectivism for philosophical realism-objectivism as the explanation of economic value; (2) a far stronger defense of the concept of private ownership as central, rather than the division of labor.

The concept of economic imputation is nominalist in humanistic economics. In Christian economics, imputation is based on God's act of economic valuation. It is ethical. It has to do with moral value. It is also epistemological: the imputation of coherence and meaning to historical objects and acts. *The biblical criterion of imputation is the kingdom of God*. The idea of imputation is central to economic theory. (It is also central to historiography.)

By shifting the explanation of economic value from realism to nominalism, economists have created epistemological dilemmas for themselves. How can they explain the relationship between value (subjective) and price (objective)? How can they defend the legitimacy of policy formation for collectives, when there is no scientific way to make interpersonal comparisons of subjective utility? How can they justify the development and use of statistical aggregates, when there is no scientific way to incorporate changes in subjective taste into the statistics? How can they compare statistical aggregates over time? How can they demonstrate scientifically that there is such a thing as economic growth?

The biblical solution is to affirm subjective economic valuation in the image of God in man. Men can accurately impute value, including economic value, because God did this retroactively, day by day, in the creation week. He will do so retroactively at the final judgment. He does so in between these two events. God tells men to evaluate all things by His laws. This is why we know that men can do this as redeemed creatures. *The judicial art of casuistry is grounded in the image of God in man*.

Men must make economic evaluations in their office as God's stewards. They must evaluate their success or failure, individually and collectively, over time. Men are under God's law, yet they are required by God to rule over His creation, also by law. They are responsible to God for the ethically consistent and economically efficient building of God's kingdom in history. Because men can *impute economic value*, they can *count the costs* of their

actions, which God requires of all men (Luke 14:28–32).

God's Bible-revealed laws are men's tools of dominion. They provide the standards of imputation. The judicial art of casuistry must be grounded in God's Bible-revealed laws. A person must enforce the judicial letter of the law in terms of the spirit of the law: its goals for history. The letter of the law makes courts *predictable*, but its spirit must be upheld in order to achieve *justice*. There can be economic justice in history. If people do not believe this, they will lose hope.

Value and price are connected by means of men's subjective imputations. This subjectivism can and does reflect objective reality and objective economic value. The link is the image of God in man. Men are told that corporate obedience to biblical law produces economic growth (Deuteronomy 8:18). Therefore, it is possible to make accurate statistical representations of the underlying reality. This is why we can achieve value-added living. God's historical sanctions produce long-term patterns. These long-term patterns can be perceived by men. Men can evaluate the success of their decisions by means of sanctions, both positive and negative.

The epistemological foundation of analyzing market processes is a theory of price. Christian economics and humanistic economics offer rival theories of price. This is because they have rival epistemologies. There is no way to reconcile these two epistemologies.

Christian economics identifies this epistemological foundation as ethical. Ethics explains the imputation of value, which in turn explains the array of prices at any time. There are eschatological implications of this outlook. The postmillennialist argues that as the kingdom of God extends its influence through time, the more that progressive sanctification brings the array of prices into a closer relation to God's imputed array of prices. The premillennialist argues that this will be true during the millennial kingdom when Jesus will rule in person, but not before. The amillennialist would argue that the array of prices either becomes less influenced by kingdom standards as the kingdom of Satan extends its power, or else the array is randomly influenced. But, in all cases, the array of prices is ethical. Prices reflect people's individual hierarchy of values.

In contrast, humanistic economics announces that the correct analytical tool is based on man's omniscience: equilibrium pricing. But this is conceptually impossible if humanistic economics is true. There could not be money prices in a world of equilibrium: a hypothetical world in which all

people are omniscient. Money is a tool for reducing uncertainty. *If there were no uncertainty, there would be no money.* If there were no money, there would be no money prices. This is why humanist economics has no analytical tool that is epistemologically valid in terms of its own presuppositions. It has lots of graphs. It has lots of equations. What it does not have is a coherent theory of price.

10

INHERITANCE

Blessed are the meek, for they shall inherit the earth (Matthew 5:5).

Analysis

I have commented on this verse in detail in my economic commentary on Matthew. It has to do with people who are meek before God and therefore active toward the world. [North, *Matthew*, ch. 4: "Meekness and Inheritance"] This prophecy implies a zero-sum contest in history between covenant-keepers and covenant-breakers. Covenant-keepers will inherit everything. This means that the capital created by covenant-breakers will be the inheritance of covenant-keepers at the end of time. It means that inheritance necessarily carries with it the concept of disinheritance. The model of this disinheritance is the poor steward who buried the coin of the owner who went on the long journey: the parable of the talents and the parable of the minas. His coin was given to the most profitable steward.

1. Covenantal Foundations

This chapter is an extension of the fifth law under **theocentric (judicial) laws**: *God mandates growth*. In Chapter 2, I wrote: "Because dominion is ethical/covenantal, corporate inheritance in history will be ethical/covenantal. God issued the dominion covenant to Adam and his heirs (Genesis 1:26–28), but there is now a covenantal separation between disinherited families and adopted families. Adoption (salvation) is by grace alone (Ephesians 2:8–9). *Grace precedes law*. Covenant-keepers are required by God to build God's kingdom in history (Matthew 6:33). This takes capital. God promises to supply this capital. This is seen clearly in God's promise that covenant-keepers will become the primary heirs in history. 'But the meek will inherit the land and will delight in great prosperity' (Psalm 37:11). Jesus repeated this promise: the meek will inherit the earth (Matthew 5:5)" (2:C:5).

This chapter is also an extension of the fifth law under **judicial (representative) laws**: *trustees designate successors*. In Chapter 2, I wrote: "This

principle applies to all forms of property and all legal arrangements for the protection and maintenance of property. This goes back to God's arrangement with Adam and Eve regarding the garden. 'The Lord God took the man and put him into the garden of Eden to work it and to maintain it' (Genesis 2:15). His children would inherit his property. *Inheritance is the legal basis of today's property.* Property can be held in trust for designated beneficiaries through the ages. The trustees are required by the trust document to administer the property in the trust in terms of the stipulations of the founding document" (2:D:5).

This chapter is also an extension of the fifth law under **stewardship laws**: *owners designate heirs*. In Chapter 2, I wrote: "In order to fulfill God's requirement of compound economic growth, there must be inter-generational wisdom passed on by owners to their as yet non-owning sons and daughters. This wisdom must include the knowledge of how to increase per capita wealth. The solution to this problem eluded mankind until about 1800. Only then did per capita wealth increase every year by 2% or more. That compounding process has created the modern world" (2:E:5).

2. Inheritance and Disinheritance

The meaning here of "meek" is not "helpless." It means "meek before God." Those people who are meek before God are not helpless. They are under God's covenant blessings. The historical process is on their side. This process is not impersonal. It is highly personal: the outworking of the decree of God.

Point five of the biblical covenant is succession. In economic theory, this is inheritance.

The essence of the dominion covenant is adding value. This is what Matthew 25:14–30 is all about: the parable of the talents. [North, *Matthew*, ch. 47] Man's God-assigned goal is to increase value in the broadest sense. He who fails to do this will have his inheritance transferred to the more productive members of society in the final judgment (Matthew 25:30). Covenant-keepers get richer. Covenant-breakers are disinherited. Put differently, the poor in spirit inherit the kingdom of God (Matthew 5:3). So do the meek, i.e., meek before God. *This is the fundamental New Testament principle of inheritance.*

This inheritance process is supposed to be reflected in the economy. Those who subordinate themselves to the demands of customers will get

richer. Those who do not will get poorer. *The market-based sanctions system of monetary profit and loss rewards those who are efficient servants of customers.* They have subordinated their efforts to the demands of customers. This is how stewards prosper. They accumulate wealth. Then they die.

Inheritance is the legal transfer of wealth at the death of the owner. This transfer is inescapable in the era after the fall of man. The accumulator of wealth cannot maintain control beyond his death. He must take steps to transfer it. This is one of the most daunting tasks of the rich man, Solomon said (Ecclesiastes 2:18–21; 6:1–2). [North, *Ecclesiastes*, chaps. 4, 21] This is the covenantal issue of inheritance: point five of the biblical covenant. It applies in two ways: inheritance and disinheritance. These are extensions of economic sanctions in history: profit and loss. These sanctions are both individual and corporate.

Both inheritance and disinheritance apply to individuals. There will be a general resurrection (Matthew 25:31–46). Covenant-keepers will receive their inheritance: an extension of the new heaven and the new earth. Covenant-breakers will be cut off eternally: the ultimate disinheritance. They will receive the second death (Revelation 20:14–15).

Inheritance also applies to the kingdom of God in history and eternity. There is a corporate inheritance. The kingdom of covenant-breaking man ceases to operate in eternity. It is disinherited.

Each covenant has a doctrine of the last things. The kingdom of God predicts the future eternal extension of its jurisdiction. The kingdom of man predicts either the heat death of the universe, in which everything dies, energy dissipates completely, and time ends, or else endless cosmic cycles. I discuss this in Appendix B. In each evolutionary scenario, meaning dies at the end, either at cosmic end or the end of this cosmic cycle. Death swallows up life. Meaninglessness swallows up meaning. There is no sovereign to impute permanent meaning to the past, present, and future. All meaning is temporal, problematical, and transitory.

A. Purpose

Point one: God's sovereignty. With respect to economics, this refers to original ownership. It is the result of God's creation. He owns the universe. Before the foundation of the world, God had as His long-run purpose for the creation of the universe the redemption of His elect. This is a matter of adoption. It is a matter of inheritance. Paul wrote:

> Blessed be the God and Father of our Lord Jesus Christ, who has blessed us in Christ with every spiritual blessing in the heavenly places, even as **he chose us in him before the foundation of the world**, that we should be holy and blameless before him. In love he predestined us for adoption to himself as sons through Jesus Christ, **according to the purpose of his will**, to the praise of his glorious grace, with which he has blessed us in the Beloved. In him we have **redemption through his blood**, the forgiveness of our trespasses, according to the riches of his grace, which he lavished upon us, in all wisdom and insight making known to us the mystery of his will, according to his purpose, which he set forth in Christ as a plan for the fullness of time, to unite all things in him, things in heaven and things on earth. In him we have obtained **an inheritance**, having been **predestined according to the purpose** of him who works all things according to the counsel of his will, so that we who were the first to hope in Christ might be to the praise of his glory (Ephesians 1:3–12).

This purpose structures all of history. Without understanding this and acknowledging this, a person misunderstands history. He begins with a distorted understanding of historical causation. Part of historical causation is economic causation. This means ethical causation: point three of the biblical covenant, biblical law, coupled with point four: predictable historical sanctions.

Redemption means "bought back." This is not man's purchase of salvation on his own behalf. He does not possess sufficient capital for this. Later in his letter to the Ephesians, Paul wrote: "For by grace you have been saved through faith. And this is not your own doing; it is the gift of God, not a result of works, so that no one may boast. For we are his workmanship, created in Christ Jesus for good works, which God prepared beforehand, that we should walk in them" (Ephesians 2:8–10). Yes, we work to honor God, but this is not the basis of our redemption. Christ's death is. Paul wrote: "But God shows his love for us in that while we were still sinners, Christ died for us" (Romans 5:8).

This fact has economic implications. It teaches that error leads people to imagine that they can successfully strive to buy their souls out of hell. Jesus taught: "For what does it profit a person if he gains the whole world

but forfeits his life? What can a person give in exchange for his life?" (Matthew 16:26). [North, *Matthew*, ch. 35] Theological error leads to the view that personal salvation is a matter of a sinner's payment to God or bargaining with God. God's purpose structures the most important of all payments to God. The payment was made by the Son of God to God the Father. It is therefore not a matter of economic planning. It precedes economic planning. This is the theological basis of this conclusion: *purpose precedes planning*.

Individuals reflect God. They are made in His image. Like God, they have general purposes. They also have specific goals that are related to their overall purposes. These purposes guide them in devising plans that they hope will enable them to fulfill their goals.

B. Planning

Point two: hierarchy. Man is under God as God's covenantal agent. This is the meaning of the dominion covenant (Genesis 1:26–28). He must make plans in order to fulfill his assignment. [North, *Genesis*, ch. 3] Built into this planning is the multiplication of the species. [*Ibid.*, ch. 4]

1. Multiplication

The dominion covenant began with multiplication. "Then God said, 'Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth.' So God created man in his own image, in the image of God he created him; male and female he created them. And God blessed them. And God said to them, 'Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth'" (Genesis 1:26–28). God defines man in terms of this covenantal assignment. The Bible defines man in a three-fold way: (1) the image of God, (2) the dominion covenant, and (3), species multiplication. Multiplication mandates extension in space and time. To the extent that it involves time, it now involves death. This raises the twin issues of death and inheritance.

Population growth is a matter of dominion. It is central to the calling of mankind. The extension of population is a covenantally mandated process. *Individual decisions produce a corporate result.* This corporate result is

mandated. Therefore, the means by which it is fulfilled is through sexual bonding within the marriage covenant. Sexual bonding is by far the best example in history of intensely self-interested decisions of individuals which produce results that are glorifying to God. The division of labor is extended by population growth. The realm of dominion is thereby extended. There is the possibility of increasing wealth per capita. The compound economic growth that began sometime around 1800 in the British Isles, Canada, and the United States has transformed the world more than anything else that mankind has ever done. The defense of the idea of the pursuit of individual self-interest as benefitting society should begin here.

The zero population growth ideology is opposed to the clear teaching of the dominion covenant. So is the zero economic growth movement. They are peas in the same anti-dominion pod.

Multiplication mandates thrift. It costs wealth to raise children. Children are wealth-absorbing creatures. Parents are obligated by civil law, by custom, and by love to care for their children. In some limited sense, children are consumer goods. But grandparents, not parents, are the main beneficiaries of children as consumer goods. Raising a family takes time and money. While parents do gain some returns in the short run, children are mostly capital expenditures until they either reach adulthood or graduate from college.

The concept of compound growth raises the question of the exponential curve. At some point, a graph of the compound growth of anything turns upward and begins to approach infinity as a limit. In a world of finite resources, this cannot continue indefinitely. With respect to human population, we will run out of living space in short order. So, this means one of two things: (1) there will be a cessation of compound population growth because of limited physical space; (2) there will be a cessation of economic growth because of limited time: the final judgment. Nothing grows forever. Historical time will end.

2. Serving the Future

Men add value to the creation over time. So, point two of the covenant—hierarchy—has to apply to this process of future-orientation. Hierarchical authority in a biblical covenant is supposed to spread outward—across borders—and through time. It takes time to spread this authority across borders. So, time and place are linked in the covenant.

In short, *the dominion covenant is future-oriented*. The process of dominion requires present sacrifice for the sake of children, but this is an indirect sacrifice for the sake of families outside the extended family. Parents train their children to become productive. This means becoming customer-satisfying. The future economic success of their children will be dependent on their efficiency in serving the demands of strangers through the market process.

Biblical stewardship is comprehensive. It involves service to God, service to family members, service to strangers, and service to ourselves as individuals. This service is always future-oriented: the next sale as well as sales by heirs in the distant future. This is inter-generational service.

Future-orientation is inescapable. It is inherent in the dominion covenant. It takes time for covenant-keepers to extend God's kingdom. This kingdom is comprehensive. It involves all of society, which is a far broader category than the state. The state is a relatively small aspect of society. The family has far greater influence than the state possesses. So does the realm of business. These realms absorb more time and money of individuals than taxes do. Wherever this is not true, the state becomes tyrannical. Then it is replaced by a less tyrannical state. Tyranny is inefficient. It invades too many spheres of life. It bankrupts itself. The classic example is the Soviet Union, from its birth on October 25, 1917 to its death on December 25, 1991.

Service is inherently future-oriented. Entrepreneurial profits are obtained in the future by means of correct forecasting and efficient planning in terms of this forecast. The essence of value-added production in a free market economy is making profits. People add to their capital by reinvesting their profits. Capital is a tool of production.

C. Imitation

Point three: ethics. This is associated with law. Jesus commanded His followers: "Go and do the same" (Luke 10:37b). These words are the foundation of all imitation. *Imitation is a crucial aspect of kingdom expansion over time*.

The best managers know that the best way to learn how to manage any organization is to work under an effective manager. This was the way of American business until the 1970s, when bureaucratic training in graduate schools of business administration began to replace the ancient systems of apprenticeship and mentoring. Here was the old rule: *on-the-job*

training. It assumed that management involves far more than what is revealed in ledgers. People are not digital creatures. We learn analogically, not digitally.

Adam had to start without a mentor. He alone in history had this independent responsibility. He was the first human. But his heirs were to receive training in his household. Then they were to depart from his household as adults, setting up their own households (Genesis 2:24). Having seen how a family is supposed to be managed, they were then to go out and apply whatever they had learned to new circumstances.

This process rested on faith in *judicial continuity in history*. The rules governing one generation apply to the next generation. General rules are applicable to new situations. These new situations are both geographical and temporal. The rules will successfully apply across a geographical boundary and a temporal boundary: from *here and now* to *there and then*. These rules will serve as tools of dominion. This is why Jesus told the man to go and do likewise. Jesus knew that there is judicial continuity in history.

This is why people believe that there are lessons worth learning in history. If there were no judicial and social continuity, lessons would not be worth learning. There would be no likelihood that a lesson learned in one time and place would be relevant in another time and place. People ask: "What are these lessons? Where is there proof that these lessons are in fact lessons? If the lessons are embedded in one time and place, on what basis can we legitimately expect them to be applicable in another time and place?"

The biblical answer is the *continuity of law* in history. Psalm 119 is the great defense of this answer. God is above the law, yet He rules through law. Man is under law. He rules over the creation by means of law. If there were no continuity of law, there would be chaos. Whirl would be king. But whirl is not king.

The biblical covenant's structure of God, man, law, sanctions, and time provides answers to the logically irreconcilable issues raised by the two major pre-Socratic philosophers, Parmenides and Heraclitus. The logically unchanging rational categories of Parmenides cannot be shown to interact with the constant flux proposed by Heraclitus. The equivalent of a logical machine cannot deal with organically evolving parts. Change is the enemy of autonomously rational categories, and vice versa. Here is the biblical solution to this dilemma. The Bible teaches that God is sovereign (Proverbs 21:1). His decree is absolute (Isaiah 45). Logic is personal, for it has its origin

in God's mind. Historical causation is cosmically personal. Coherence originates in God. The continuity of law originates in God.

God's covenants are above all ethical. *There is ethical continuity over time and across borders*. A covenant-keeper can extend God's kingdom through time and across borders. Why? Because God's law is the covenant-keeper's tool of dominion. God's law applies to the details of history. There is covenantal continuity in history. With respect to the individual and the church, this continuity reaches into eternity.

The division of labor rests on judicial continuity through time. Because of continuity across borders and through time, people can more safely trade with each other. They can understand each other. They can make contracts with each other. They can predict each other's behavior. They can coordinate their plans with each other. This increases the output of cooperating people. It extends their dominion as individuals. It also extends the dominion of cooperating social groups. Both the one and the many are recipients of positive sanctions.

For any *system of imitation* to function properly, there must be a *system of predictable sanctions*, both positive and negative (point four). If people could not predict the outcomes of their own behavior, as well as others' behavior, they could not make accurate plans. They would not know which practices should be adhered to, and which should be abandoned. Only because there are predictable sanctions in history can Jesus' command be trusted: "Go, and do thou likewise." It assumes that if we follow the lead of a successful person, we can expect to enjoy comparable success.

D. Entrepreneurship

Point four: sanctions. Entrepreneurship has to do with forecasting the outcomes of plans. Outcomes are guided by objective economic sanctions: monetary profit and loss. There is causality in economic affairs. This is why rational economic forecasting is possible.

An entrepreneur in a free market is motivated to maximize profits, mainly monetary profits. There is a planning function in all entrepreneurship. This is related to point two. But the primary guide for economic planning is accounting-based profits. This is why I categorize entrepreneurship under point four rather than point two. Economic results are assessed objectively: monetary profit or loss. They are also assessed subjectively: imputation. Both are aspects of point four: judgment and sanctions. The arche-

type is God's final judgment at the end of history: point four. This leads to a conclusion: *all creativity is results-oriented*. It was for God in the creation week. It is for man.

Every system of economic theory must provide an answer to two questions. First, what is the source of profits in a competitive economy? Second, if it is true, as free market economists argue, that every resource receives its proper share of the value of its contribution in the production process, what is the source of profits?

Ludwig von Mises provided an answer. The free market pays for all factor inputs in terms of *expected future value*. But expectations can be inaccurate. It is possible to pay too much for a factor of production. This will produce either losses or reduced profits. It is also possible to pay less than value added. This produces higher profits. It is the *discrepancy between expectations and reality* that produces either profits or losses. In his discussion of entrepreneurship, profits, and losses in his magnum opus, *Human Action* (1949), he stressed the role of the entrepreneur.

> The entrepreneurial function, the striving of entrepreneurs after profits, is the driving power in the market economy. Profit and loss are the devices by means of which the consumers exercise their supremacy on the market. The behavior of the consumers makes profits and losses appear and thereby shifts ownership of the means of production from the hands of the less efficient into those of the more efficient. It makes a man the more influential in the direction of business activities the better he succeeds in serving the consumers. In the absence of profit and loss the entrepreneurs would not know what the most urgent needs of the consumers are. If some entrepreneurs were to guess it, they would lack the means to adjust production accordingly (XV:9).

The problem with his exposition in *Human Action* is this: it is not clear where these profits or losses come from. In a speech, "Profit and Loss," delivered in 1951, he made his position clear. First, the primary issue is *forecasting*. Second, there is the development of *plans* to buy low and sell high. This is possible only because competing investors do not see the potential for final sales. Third, the plan must be *implemented*. He wrote:

> Profit emerges from the fact that an entrepreneur estimates the future prices of the products more correctly than his rivals do. He buys some or all of the factors of production at prices which, seen from the point of view of the future state of the market, are low. Thus, his total costs of production—including interest on the capital invested—are lower than what he receives from the sale of the product. This difference is entrepreneurial profit.
>
> On the other hand, the entrepreneur who misjudges the future prices of the products allows for the factors of production prices which, seen from the point of view of the future state of the market, are too high. His total costs of production exceed the prices at which he can sell the product. This difference is entrepreneurial loss.
>
> Thus profit and loss are generated by success or failure in adjusting the course of production activities to the most urgent demand of the consumers. Once this adjustment is achieved, they disappear. The prices of the complementary factors of production reach a height at which total costs of production coincide with the price of the product. Profit and loss are ever-present features only on account of the fact that ceaseless change in the economic data makes again and again new discrepancies, and consequently the need for new adjustments originate.

Here is the heart of the matter: "The activities of the entrepreneur consist in making decisions. He determines for what purpose the factors of production should be employed." He can buy low only because other entrepreneurs do not see this opportunity. He can sell higher only because other entrepreneurs have not brought competing goods to the market. Why not? Because they did not see the opportunity.

The essence of entrepreneurship is forecasting future consumer demand. There is continuity over time. But there is also discontinuity. Competing entrepreneurs failed to see the discontinuity: factors of production that can be bought, reassembled, and sold as consumer goods at a price higher than the prices of all of the factors of production, including time (interest rate). The discontinuity is filled by entrepreneurs. As information spreads, the discontinuity—a discrepancy between factor prices and final products'

prices—disappears. Mises wrote: "Profits are never normal. They appear only where there is a maladjustment, a divergence between actual production and production as it should be in order to utilize the available material and mental resources for the best possible satisfaction of the wishes of the public. They are the prize of those who remove this maladjustment; they disappear as soon as the maladjustment is entirely removed."

The system of profit and loss is governed by future-orientation: *faith in continuity over time*. To increase his wealth, a producer must meet future consumer demand. Not being omniscient, forecasters make experience-based guesses. They take hunches seriously. Some win. Some lose. But the entrepreneurial function is tied to the individual's desire to accumulate wealth by satisfying the future demand of customers. The self-interest of the producer and the self-interest of buyers together produce goods and services that clear the market at some array of selling prices.

E. Dominion

Point five: succession. In economics, dominion requires compound economic growth. This is possible to attain only because there are predictable sanctions in history. These include economic sanctions. This means that there is a possibility to increase production over time. Why? Because *positive sanctions accumulate*. There is economic growth because output increases. This is promised in Deuteronomy 8:18. "But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today." There is positive feedback between covenantal faithfulness and wealth. Increasing wealth confirms the covenant. [North, *Deuteronomy*, ch. 22]

Mises wrote in *Human Action*, "We call a progressing economy an economy in which the per capita quota of capital invested is increasing" (XV:9). The basis of economic growth is therefore thrift: the reduction of consumption by the investor, who makes available his saved money, which is then used to increase the purchases of raw materials, capital goods, and labor during a period of production. But thrift is insufficient. There must also be competent entrepreneurship that produces net profits for society.

> In the progressing economy the range of entrepreneurial activities includes, moreover, the determination of the employment of the additional capital goods accumulated by new savings. The in-

> jection of these additional capital goods is bound to increase the total sum of the income produced, i.e., of that supply of consumers' goods which can be consumed without diminishing the capital equipment used in its production and thereby without impairing the output of future production. The increase of income is effected either by an expansion of production without altering the technological methods of production or by an improvement in technological methods which would not have been feasible under the previous conditions of a less ample supply of capital goods (XV:9).

This assumes that entrepreneurial guidance is accurate. It is always possible to pour money down rat holes. So, increased thrift is necessary, but it may not be sufficient to produce economic growth. John Maynard Keynes put it well in his 1930 *Treatise on Money*. "Thus, Thrift may be the handmaid and nurse of Enterprise. But equally she may not. And, perhaps, even usually she is not. For enterprise is connected with thrift not directly but at one remove; and the link which should join them is frequently missing. For the engine which drives Enterprise is not Thrift, but Profit" (Vol. 2, p. 132).

The biblical goal is to build a posthumous legacy, individual and corporate, in the broadest sense. This legacy is part of the kingdom's process of compound growth, which is a moral imperative. To the extent that covenant-keepers obey God's laws, they will experience blessings. These blessings confirm the covenantal connection. The book of Job reinforces this, but only in the final chapter.

Because the one and the many are coordinated in the covenant, the covenant-keeper's legacy compounds in history, and this extends God's corporate kingdom. The capital base of both the individual and the collective grow. The reinforcing gains of the one (corporate) and the many (individuals) are coordinated by the Holy Spirit under God's authority. Whenever this is not true, men's first task is to identify which biblical laws are being broken. If, over several years, the economy is not bringing greater prosperity to its members in response to their greater self-discipline and greater intra-covenantal cooperation, they should start looking for hidden sins. Covenant-breaking is most likely the cause.

Conclusion

The dominion covenant assigns to all mankind the task of adding value to God's creation. The creation was created perfect, but it was incomplete. Man was created perfect, but he was incomplete. Both man and nature will always remain incomplete. They are not infinite. Man will never understand God's infinitude. Yet an infinite God governs the world. To understand this world perfectly, men would have to understand God perfectly, for God interacts with this world. Hence, man can never comprehend the world. In order for mankind to govern the world, individuals must rely on God as their source of covenantal laws, nature's laws, and their personal insight (judgment) as to the proper management of all things. The division of intellectual labor mandates the cooperation of individuals in this species-wide task.

The process takes time. Thus, there has to be an increase of man's knowledge and jurisdiction over time and space. This means that the improved economic value of the creation over time testifies to man's subordination to God. Economic growth reinforces the covenant. It testifies to God's existence, with man and nature under God by means of God's law. Men are supposed to perceive this added value, interpreting it as creatures under God. There must be continuity of God's law through time. This rests on the continuity of God's decree. Without this continuity of law, there would be no way to improve our knowledge of causation. Without knowledge of causation, we would live in mental chaos as well as cosmic chaos.

The fifth point of the biblical covenant is inheritance. This points to *continuity over time*. It also points to *net added value*. A person is to leave more wealth behind, as evaluated by God, than he received at birth. This means that there must be per capita economic growth. The members of each generation are to have more capital to work with than the preceding generation.

This has been fulfilled for more than two consecutive generations only since about 1800. In Great Britain, Canada, and the United States, compound growth began around 1800. It has not been reversed, except during the Great Depression of the 1930s, which was a worldwide phenomenon. This compound per capita economic growth has transformed human society around the world. The world in 1900 in the United States would not have been recognizable to someone who died in 1800. The world in 2000 would have been almost unrecognizable to someone who died in 1900—almost,

but not quite. Indoor plumbing was widespread in cities. Electric motors were becoming common in industry. Streetlights were used in large cities. The internal combustion engine was being used in cars, but cars were rare. There was no voice radio, only radio telegraphy, then a few years old. Train travel was well developed, as were steamships. There were no airplanes. There were anesthetics, but no sulfa drugs. There were punch cards, but no digital computers. There was no television or Internet. There was no electrical air conditioning. What would not have been recognizable, or even conceivable, is the level of taxation in 2000. Yet that came in the West before the end of World War I, fewer than two decades later.

Value-added living mandates thrift. Capital must be accumulated in order to fund increasing production. This mandates thrift. *This means that consumption cannot legitimately be the sole end of production.* There must be self-restraint on consumption individually to please God. There must be self-restraint corporately to achieve economic growth.

To assess either economic growth or contraction, there must be value criteria. These criteria must be perceptible to individuals. This means that there are interpersonal comparisons of subjective utility, for individuals are required by God to assess corporate economic growth. Without the ability to compare subjective utilities, there could be no valid price index numbers. There could be no valid economic comparisons at all. All schools of economics rely on these indexes to discuss history. For example, Austrian School economists argue that monetary inflation produces price inflation. But to say anything verifiable about price inflation requires the use of an index number.

All economists make assessments regarding corporate success. But, given the epistemological presuppositions of all schools of modern humanistic economic theory other than Marxism, they cannot do this, given the pure subjectivism of all nominalism. Marxism is an exception because its adherents still adhere to the objective value theory that preceded the marginalist revolution of the 1870s. Marxist economists do not show how economic realism is possible, but they nonetheless maintain it. In this sense, the Marxists are the last of the philosophical realists in economics. There are not many of them any longer. The suicide of the Soviet Union in late December 1991 decimated their already thinning ranks.

CONCLUSION TO PART 2

> *But if any of you needs wisdom, let him ask for it from God, the one who gives generously and without rebuke to all who ask, and he will give it to him. But let him ask in faith, doubting nothing. For anyone who doubts is like a wave in the sea that is driven by the wind and tossed around (James 1:5–6).*

You have survived Part 2. You should be ready to deal systematically with the topics of economic theory. The sea of economic theory should be getting calmer.

You were not starting from scratch when you began reading this volume. You should previously have read Volumes 1 and 2. I hope you had read *The Covenantal Structure of Christian Economics*. You already understood much of the material that is part of the corpus of economic theory. But you may not have understood this material in terms of the five integrating analytical categories of Christian economics: *purpose, allocation, boundaries, imputation,* and *inheritance*. Things should be getting clearer now. As you read the following chapters, you should be able to assess them in terms of one or more of these five categories. This will help you understand them better. It should also help you to remember them better.

I like to think of the covenant model in terms of a hand. The hand has five digits. The key digit is the thumb. The thumb lets us grab hold of objects. Without one, we are hampered. In the ancient world, a warrior without a thumb could not pull a bow string or hold a spear. A big toe is comparable in importance. We are unbalanced without our big toes. "But Adoni-Bezek fled, and they pursued him and caught him, and they cut off his thumbs and his big toes. Adoni-Bezek said, 'Seventy kings, who had their thumbs and their big toes cut off, gathered their food from under my table. As I have done, even so God has done to me.' They brought him to Jerusalem, and he died there" (Judges 1:7–8).

The thumb of the biblical covenant model is point one: God. In social

theory, this is sovereignty, or at least it ought to be. In Christian economic theory, this is God's original ownership. But original ownership is primarily a judicial category. From the standpoint of economic analysis, *purpose is the thumb*. It explains why God created the universe. It also explains why people act one way and not another. When I use the phrase "analytical category," I mean a concept from which we can draw economic conclusions: "if . . . then."

The Bible teaches that God is sovereign over nature. He is also sovereign in the affairs of men. Joseph's declaration to his brothers in Egypt was accurate. "As for you, you meant to harm me, but God meant it for good, to preserve the lives of many people, as you see today" (Genesis 50:20). Solomon wrote: "The king's heart is a stream of water in the hand of the Lord; he turns it wherever he pleases. Every person's way is right in his own eyes, but it is the Lord who weighs the hearts" (Proverbs 21:1–2). These passages affirm the biblical doctrine of providence: the comprehensive sustaining power of God in history. In Volume 1, Chapter 11, I identified providence as point one of the economic covenant in the era of redemption. But providence is not an analytical category. Rather, it is a conceptual category. Philosophers would call it a metaphysical category: how the world is held together. God's providence provides the cosmic framework for analysis in every academic field. The doctrine of providence is the theological foundation of Christians' declaration of the absolute sovereignty of God. This is a presupposition, not an analytical category.

Purpose is the initial analytical category of Christian economics. I say this because the New Testament clearly affirms that God's purpose preceded His creation of the world. Man is made in God's image. People have purposes: goals. This must be the starting point of economic analysis. I am not saying this because Mises adopted purpose as the starting point for his deductivist economic analysis. I prefer to argue that Mises adopted purpose as his starting point because he understood the principles of covenantal economic thought better than his contemporaries did. His insight was an aspect of God's common grace to Mises.

Category two, allocation, is familiar to humanistic economists. They call this resource allocation. More specifically, they call it *economizing*. Some economists have defined economic theory in terms of this analytic category. This is a mistake.

Category three, boundaries, is better known among economists as property rights. These are legal immunities against invasion by non-owners. Free

market economists affirm the private property order as crucial for maximizing economic efficiency. They refuse to invoke morality. Also, category three is associated with limits, including limits imposed by scarcity.

Category four, imputation, is an aspect of exercising judgment. It has to do with economic value. Ever since the publication of Carl Menger's *Principles of Economics* (1871), economists have explained economic value in terms of men's subjective imputation: pure nominalism. In order to keep economic theory from being sunk in a sea of competing subjective imputations, just as value theory (axiology) has been sunk in philosophy, Christian economists must affirm that imputation by the Bible's Trinitarian God provides the conceptual foundation for identifying objective changes in economic development. For example, price index numbers are examples of such analytical tools. They are widely accepted by economists, yet they are conceptually illegitimate in terms of Menger's subjective nominalism. They are statistical aggregates. Such aggregates are conceptually valid only if there is an objective scale of economic values, which cannot exist under nominalism.

Category five, inheritance, is clearly a judicial category, but it is also an economic category. It is the basis of humanistic economists' only widely agreed-upon standard of performance: economic growth, which is measured by statistical aggregation (point four).

With these categories in mind, you are now ready to explore some important themes of economic theory, but from a Christian point of view.

Part 3
THEORY

INTRODUCTION TO PART 3

Moses said to the Israelites, "See, the Lord has called by name on Bezalel son of Uri son of Hur, from the tribe of Judah. He has filled Bezalel with his Spirit, to give him wisdom, understanding, and knowledge, for all kinds of craftsmanship, to make artistic designs and to work in gold, silver, and bronze; also to cut and set stones and to carve wood—to do all kinds of design and craftsmanship. He has put it in his heart to teach, both he and Oholiab son of Ahisamak, from the tribe of Dan. He has filled them with skill to do all kinds of work, to work as craftsmen, as engravers, as embroiderers in blue, purple, and scarlet wool and fine linen, and as weavers. They are craftsmen in all sorts of work, and they are artistic designers" (Exodus 35:30–35).

God empowered Bezalel to be a master craftsman. He also empowered him to be a teacher. He then empowered his student, Oholiab. That was merely the beginning. "So Bezalel and Oholiab and every skilled person to whom the Lord has given skill and ability to know how to do any work in the construction of the holy place are to do the work according to all that the Lord has commanded" (Exodus 36:1). There is a lesson here. *There is always a need for skilled craftsmen*. If you want to produce something great, it is not sufficient to hire workers who understand only the basics. The Israelites understood the basics. They had served as builders in Egypt. That was not sufficient.

It is also not sufficient to have a detailed blueprint. God provided a detailed blueprint for the tabernacle. The craftsmen knew what was required. Chapters 36 through 39 describe in detail what the craftsmen did. This is the longest passage in the Bible that is devoted to a single historical topic. Few people read it carefully. They skip over the details. Yet there is an important lesson in this passage. No matter how detailed the specifications are for any project, it takes highly specialized, highly skilled people to complete it. Over time, algorithms and robots will replace millions of skilled

workers, but it will take highly skilled programmers and robot designers to enable this replacement. Only if computer programs master the art of writing software will humans no longer be part of the process. But total replacement cannot happen. Why not? Because human beings are responsible before God for the fulfilment of their share of the dominion covenant. God did not make a covenant with impersonal digits. He does not hold robots responsible. *Responsibility is inescapably legal and personal.*

Next, there will always be a role to play by virtuosos. Digital mastery will never be sufficient. There will always be a short supply of virtuosos.

What is true of physical projects is equally true of intellectual projects. There will always be demand for master craftsmen in every academic discipline. These people are creative. They go beyond the mere blueprints. They create things of beauty.

I am inviting you to do the mental work to achieve journeyman status. Then go beyond to become a craftsman and then a master craftsman. Who knows? You may even become a virtuoso. But it will take years of hard work. You may not receive applause from men.

A. Science and Art

There is a familiar saying that we apply to every area of human action: "This is more art than science." The person who says this may think he is making a profound observation about some human skill, whether physical or mental, but he is simply repeating what we call a commonplace. There is nothing unique about the observation. This would be a unique observation: "This field is entirely a science. There is nothing artistic about it."

The scientific aspect of any discipline has to do with fixed laws: repeatable patterns. These patterns are so familiar that a brand-new student can usually learn a few basics. These are entry-level basics for entry-level students. These basics, when mastered, enable the student to go on to the next stage. He will learn about and then master more complex patterns. This pattern of learning is familiar in every field.

In every field, the level of mastery required to advance to the next stage proves to be too difficult or too uninteresting for some students to advance. They may stop trying. They may content themselves with performance levels that are associated with journeyman status. Others may become competent but undistinguished performers. Fewer still will become masters. At the top are virtuosos.

At every stage, there are skills that cannot be taught by conventional educational programs. The higher up the ladder of skills, the more that attainment is dependent on a mentor. The mentor can put into words, actions, and especially observations what a manual cannot. I often use the example of tying a pair of shoelaces. A video can show a newcomer how to do this when a written description cannot. Some learners will require literal hands-on instruction.

At every stage, a student must possess untaught and previously unknown aptitudes in order to advance to the next stage. The more proficient that the student must be, the more that observers call this an art. When we cannot explain verbally what the skill is or requires, we use the word "art." It means this: *unteachable by conventional training methods*. In economic theory, the supreme example is entrepreneurship. Some people can foresee what future consumers will be willing and able to pay. This cannot be taught. This is why they can gain an above-average rate of return, called profit, but sometimes called entrepreneurial profit. We could just as accurately call this artistic profit.

The highest levels of performance in any field are more art than science. This means that they cannot be described verbally and taught by a formal system of instruction.

This applies to economic theory. There are basics in economic theory. They involve gaining an understanding of such terms as these: "supply and demand," "scarcity," "cost," "incentives," "profit and loss," "*ceteris paribus*" [conditions remaining constant], and many others. The greater the intellectual skill of the student, the greater his understanding of these terms. He can get beyond the ability to define them. He can provide examples from the real world. In short, he gains the skill of *casuistry*: applying general principles of economic analysis to real-world conditions.

As students advance beyond their economics 1 course, formal classroom instruction in economic theory steadily moves away from simple definitions and simple examples. It introduces higher mathematics and complex graphs. It requires the mastery of jargon. Example: "The marginal cost curve intersects the average total unit cost curve at the point of optimum productivity." Problem: the idea of a cost curve is misleading. This is because human action deals with *discrete* purposes, plans, and decisions—discontinuities—not *continuities* that are mathematically indistinguishable from before and after, from "go/no go." This is why Ludwig von Mises never

used graphs. He also never used the calculus to explain human action. Graphs and lines apply to changes in physics, in which there is no decision-making by the things being measured, but not human action. Academic economists have adopted the model of physics, which Mises opposed. The academic guild has ignored him. Anyone who doubts me should look at the first page of any three articles in the scholarly journal, *Econometrica*. This is what happens when intellectuals attempt to make any social science a pure science with physics as the model.

B. Artistry and Persuasion

The art of persuasion is called rhetoric. It has to do with images, symbols, metaphors, and analogies. There are rules of rhetoric going back to Aristotle, but it takes artistry to transform these rules into persuasive speech or writing. There are students of rhetoric who can list these rules in an examination, but most of them are unable to persuade audiences of much of anything, other than the desire to stop listening. I have never taken a course in rhetoric or read a book on it, yet I have had the ability to change the minds of large audiences ever since I was 16 years old. No one taught me how to do this. In the area of public speaking, I am an artist, not a scientist. This has in no way hampered me.

I am at the tail end of a dual career as an economic theorist and a professional writer. I have read many books on economic theory. I have written dozens of books on the topic, and thousands of articles. I understand the logic of economic theory. I understand how to structure an argument. Trust me when I say that economists follow no pattern in presenting the heralded science of economics. Textbooks have chapters on certain aspects of economics that other textbooks include, but not in the same sequence. The logic of some textbooks may be similar, but there is little unity of presentation. There will be some agreement on theory and policy. Most textbooks favor low tariffs and free trade. They criticize cartels, with one glaring exception: central banking. They criticize monopolies, but they do not consider the argument that almost all monopolies are produced by government intervention into the free market. They do not conclude that there is no need for anti-trust legislation. Rather, there is a need for the repeal of laws that promote monopolies and oligopolies. They call for more government regulation, not less.

We might conclude this: "If economic theory were really a science, there would not be such disagreement on basic laws. There would not be such

variations in presentation." That conclusion would be incorrect. *In every scientific guild, there are irreconcilable disagreements.* Textbooks deliberately conceal the extent of these disagreements. Also, within every scientific guild, there are variations of presentation, even in introductory textbooks. *The more advanced the level of science, the more disagreements and variations there are.*

There is a wider range of artistry than there is of agreement. The agreements are sufficient to establish the intellectual boundaries of a science or an academic discipline. This is true of every profession. But these boundaries are not rigid. There are creative academic practitioners who borrow from other disciplines. Some of these practitioners are virtuosos because of this creative borrowing. The field of behavioral economics, which began in the 1970s, was pioneered by a pair of Israeli psychologists, Amos Twersky and Daniel Kahneman. Twersky was more of a scientist. Kahneman was more of an artist. The story of their partnership was written by one of the most artistically gifted and financially successful non-fiction authors of the early twenty-first century, Michael Lewis: *The Undoing Project* (2016). The field of law and economics, which began in the late 1950s, was a initially a joint effort between free market economists associated with the University of Chicago and legal theorists who were also associated with the University of Chicago. The most influential economist of the twentieth century was John Maynard Keynes. He received only a bachelor's degree in mathematics.

If you think you are qualified, and you are determined to find the time, I want you to pursue the life of a scholar. If you do this, you should not imitate this book or any other treatise. Treatises are highly individualized. There are no fixed guidelines for the sequence of categories or topics. Rothbard's *Man, Economy and State* presents much the same content that we find in Mises' *Human Action,* but the chapter titles are different, and so is their sequence. George Reisman's treatise, *Capitalism*, written by a student of Mises and a friend of Rothbard's, is very different in structure from the other authors' treatises. There is science here. There is also artistry.

You should strive to master the categories of economic theory, but you should then apply your own artistry.

C. Metaphors and Understanding

It is difficult for people to think of a complex system without at some point relying on a metaphor or an analogy to clarify in their own minds

what the system is all about. Metaphors and analogies are even more important in teaching. People do not follow long chains of reasoning. Even when they do, they can rarely remember each of the links in the chain. This is why we rely on metaphors and analogies to help people understand cause-and-effect. (Example: links in a chain of reasoning.)

1. "I, Pencil."

If you have read Volume 2, *Teacher's Edition*, you have been introduced to much of the scientific basis of economics. By this, I mean a journeyman's understanding of patterns of human behavior that are based on economic incentives. But you have been introduced to more than a journeyman's understanding. Volume 2 rests on a work of brilliant artistry: Leonard E. Read's essay, "I, Pencil." That was a deliberate metaphor: an autobiography of a pencil. It revealed the power of the division of labor. I then used an analogy to explain the market process: an auction. The market really is an auction, but it has not been discussed by economists as an auction. I came up with that analogy in the mid-1970s. It came to me unexpectedly when I was trying to explain the price effects of central banking's injection of money into the commercial banking system.

As it turns out, Mises used this metaphor in 1949. I failed to remember this. I came across it in my just-in-case-I-missed-anything-important re-reading of *Human Action* in 2019. He wrote briefly of entrepreneurs as participants in an auction. "The entrepreneurs, eager to earn profits, appear as bidders at an auction, as it were, in which the owners of the factors of production put up for sale land, capital goods, and labor. The entrepreneurs are eager to outdo one another by bidding higher prices than their rivals." He did not apply this insight to the market process in general. If he had, and if he had done this early enough in his book, his book would have been far more powerful both rhetorically and analytically. This is because the free market really is a gigantic auction. An auction would have been a far better metaphor than the most famous metaphor in economic theory, Adam Smith's invisible hand. If Smith had understood that the market is a gigantic auction, *The Wealth of Nations* would have been a more powerful book rhetorically and analytically.

You should be aware of the power of metaphors to convey understanding. Parents use metaphors to help their children understand difficult topics. This does not cease when we grow older. Metaphors continue to shape our thinking. The imagery conveyed by the phrase Big Bang shapes the thinking

of most humanists, yet what cosmologists describe as having taken place does not conform to anything on earth that explodes. How many intellectuals who have invoked the Big Bang have explained accurately what supposedly took place or how its supposed chronology is defended? Almost none.

2. Nisbet on Metaphor

Half a century ago, a book by my mentor Robert Nisbet was published: *Social Change and History* (1969). It dealt with a series of intellectually powerful metaphors. He began the Introduction with this section: "History and Metaphor."

> No one has ever seen a civilization die, and it is unimaginable, short of cosmic disaster or thermonuclear Holocaust, that anyone ever will. Nor has anyone ever seen a civilization—or culture or institution—in a literal process of decay and degeneration, though there is a rich profusion of these words and their synonyms in Western thought from Hesiod to Spengler. Nor, finally, has anyone ever seen—culturally, empirically seen, as we see these things in the world of plants and animals—growth and development in the civilizations and societies and cultures, with all that is clearly implied by these words: change proceeding gradually, cumulatively, and irreversibly, through a kind of unfolding of internal potentiality, the whole moving toward some and that is presumably contained in the process from the start. We see none of these things in culture: death, degeneration, development, birth.
>
> All that we see are the mingled facts of persistence and change. We see migrations and wars, dynasties toppled, governments overthrown, economic systems made affluent or poor; revolutions in power, privilege and wealth. We see human beings born, meeting, child-rearing, working, worshiping, playing, educating writing, philosophizing, governing. . . . But we do not see "death," "decadence," "degeneration," or "sickness," we do not see "genesis," "growth," "unfolding," or "development." Not in cultures and societies (p. 3).

Nisbet was a defender of the use of metaphors. His book is a profound

defense of the use of such metaphors. He believed that it is not possible to understand the world around us without relying on metaphors. He wrote: "What is a metaphor? Much more than a simple grammatical construction or figure of speech. Metaphor is a way of knowing—one of the oldest, most deeply embedded, even indispensable ways of knowing in the history of human consciousness. It is, at its simplest, a way of proceeding from the known to the unknown" (p. 4). My position is this: scholars should avoid reliance on metaphors as substitutes for careful analysis. Causation is not based on metaphors. It would have been far better for the history of free-market economic theory if Adam Smith had never invoked the invisible hand. It would have been far better if he had invoked the providence of the Trinitarian God. But that is not a metaphor.

3. Humanism's Twin Metaphors

Nisbet pointed out that social theory relies on two conflicting metaphors: the machine and the organism. The machine is a fixed construction. It can move internally, but it cannot develop. Its parts may grow rusty and break, and it may shut down. It cannot repair itself. It does not evolve. It is designed from the outside, and it is manufactured from the outside. It is predictable. It usually is reliable. It offers no surprises. In contrast is the organism. It changes constantly. It grows. If it is injured, it repairs itself. If we are to believe modern evolutionary theory, a species actually evolves over time. This process is fundamentally different from the machine. The first metaphor has been dominant ever since the days of Sir Isaac Newton: the late 1600s. The second metaphor has steadily replaced Newtonianism. It is associated with Charles Darwin (1859). Nisbet believed that the conceptual power of organism has been greater than that of mechanism. He explained why in his chapter on metaphor in his book, *Prejudices: A Philosophical Dictionary* (1982). Nevertheless, in economic theory, mechanism is by far the more dominant metaphor.

Both of these metaphors offer no hope to man. The machine eventually wears out and stops working. This is an aspect of the second law of thermodynamics, also known as entropy. There is no way that a self-contained machine can continue to operate indefinitely. This is also true of the cosmos in general. There will eventually be the heat death of the universe. All life will end. All progress will and. All meaning will end. I discuss this in Appendix B. Then there is the metaphor of the organism. All organisms eventually die.

The only hope for those who believe in the organism is this: there can be species evolution. Species evolution implies that mankind may someday be replaced by something that has evolved out of mankind, or conceivably has evolved from another line of life, possibly extraterrestrial. Man will evolve. Man's standards will evolve. By the time of the heat death of the universe, mankind will not exist. Mankind may not exist any longer within a million years or so. Some frightened analysts argue that digital evolution may replace mankind within a century. Everything that mankind has built will either fall to rubble, mechanically speaking, or return to dust, organically speaking.

I do not accept either as these metaphors as valid in economic analysis. The Bible does give a little credence to the organic metaphor. Paul writes of the church as being made up of members (Romans 12:4; I Corinthians 12:12–27). This is why we called those who belong to churches *members*. The Bible speaks of the church as Christ's bride. But there is no hint of evolution. There is an absolute denial that the church will ever die. It extends into eternity, according to Revelation 21 and 22.

It is common for economists to speak of the free market as a mechanism. I have done my best in recent years to avoid speaking of the free market as a mechanism. I much prefer to speak of it as an auction. It is an developing process; it is not a mechanism.

4. Continuity and Change

I raise this issue because of the ancient philosophical problem of continuity and change.

Human thought cannot escape the problem of continuity and change. To understand the world around us, we must use fixed logic. We must also perceive external reality, which is constantly changing. Our logic must apply to the changing environment. It must assess the change in terms of our logic. This means that there must be correspondence between our orderly logic and the orderly but changing external world. This is the central issue of epistemology.

The Bible says that God does not change. "I will not break my covenant or change the words of my lips" (Psalm 89:34). "Every good gift and every perfect gift is from above. It comes down from the Father of lights. With him there is no changing or shadow because of turning" (James 1:17). "Jesus Christ is the same yesterday, today, and forever" (Hebrews 13:8). *The orderliness of God's mind is the basis of the orderliness of our minds*. We are made

in His image. God runs the world providentially, so that our minds can understand the world around us.

Humanists reject the idea of God's providence: cosmic personalism. They insist that the external realm of nature is governed by impersonal, meaningless chance. Yet they also insist that the external realm of nature is orderly. Therefore, science is possible. Technology is possible. Social theory is possible. This dualism goes back to Parmenides and Heraclitus. Parmenides believed in logic. What man's mind determines is the only reality. This is the realm of pure law. On the contrary, said Heraclitus, everything changes. This must include logic. This is the realm of pure chance. These are two inconsistent realms. As men say, "never the twain shall meet." But humanists insist that they must meet if we are not to go insane.

To help you understand these two positions, I now invoke humanism's competing metaphors. It is legitimate to think of the philosophy of Parmenides as mechanistic. In his system, logic is a self-contained whole. It is like a machine with no broken parts. Heraclitus saw historical change as organic: a flowing river. In contrast, the biblical explanation of social change is neither mechanistic nor organic. It is covenantal/judicial. It is grounded in ethics. Neither an autonomous machine nor an autonomous organism is grounded in ethics.

Conclusion

In Part 3 of *Student's Edition*, I presented the five categories of the practical agenda of Christian economics: providence, service, leasehold, entrepreneurship, and compounding. This agenda has to do with redemption: covenant-keepers' repurchase of the world on behalf of God. This is the issue of stewardship. These categories are crucial for enabling covenent-keepers to think clearly about the agenda of Christian stewardship.

This agenda raises a question: "What are the five parallel categories of Christian economic theory that undergird this agenda?" In Part 2 of this volume, I presented what I regard as the five most general conceptual categories of Christian economics: purpose, allocation, boundaries, imputation, and inheritance. These categories structure analytically the many insights of economic theory. Non-Christian economists can and should use secularized applications of these categories in order to improve their versions of economic theory. Their reconstructions will still be covenantally incorrect, but more coherent than the approaches they use today.

Part 3 presents my self-consciously Christian reconstruction of the more familiar categories of humanistic economic theory. They are found in treatises and textbooks by humanistic economists, but always structured in terms of the presuppositions of human autonomy and mankind's agenda. My conclusions are generally consistent with the conclusions of free market economists, especially Austrian School economists. But my epistemological presuppositions are radically different. I am neither a nominalist nor a realist. I am a covenantalist. I am neither a deductivist nor an inductivist. I am a presuppositionalist. These distinctions matter.

If you want to understand the strategic difference between Christian economics and humanistic economics, begin here: "No man can serve two masters: for either he will hate the one, and love the other; or else he will hold to the one, and despise the other. Ye cannot serve God and mammon" (Matthew 6:24, King James Version).

In order to conform to what I think is a fundamental and inescapable aspect of everyone's life, namely, *personal responsibility before God*, I have focused on responsibility. It is best for Christians to explain the operation of the economy in terms of man's responsibility, individual and corporate, before God. *I link responsibility with ownership.* The dominion covenant commands the extension of mankind's corporate responsibility over the earth. This means, inescapably, the extension of individuals' ownership of portions of the earth. Economic theory should begin with judicial principle of ownership, meaning God's original ownership. *To understand the economics of ownership, we must first understand purpose*, for God had a purpose for the creation, and His creation of the universe established His original ownership. The greatest single benefit of the free market system is its legal link between personal responsibility, personal action, and personal self-interest. This is why the free market always triumphs over every other form of ownership.

11

TRINITARIAN OWNERSHIP

In the beginning, God created the heavens and the earth (Genesis 1:1).

God said, "Let us make man in our image, after our likeness. Let them have dominion over the fish of the sea, over the birds of the sky, over the livestock, over all the earth, and over every creeping thing that creeps on the earth" (Genesis 1:26).

In the beginning was the Word, and the Word was with God, and the Word was God. This one was in the beginning with God. All things were made through him, and without him there was not one thing made that has been made (John 1:1–3).

Analysis

God's creation of the universe out of nothing established His legal ownership over everything. "The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers" (Psalm 24:1–2). This starting point is theocentric. God is sovereign; man is not.

The New Testament says that God had a purpose before the creation. This purpose was redemptive (Ephesians 1:1–11). Analytically, God's purpose precedes the creation. Judicially, the creation is fundamental to economics. It establishes God's original ownership. But in the case of God's creation of the universe, *purpose preceded both creation and ownership.* Creation manifested God's original ownership. God's providence sustains His ownership. It is the metaphysical foundation of coherence. The epistle to the Hebrews explains both the creation and providential coherence in terms of Jesus. "Long ago God spoke to our ancestors through the prophets at many times and in many ways. But in these last days, he has spoken to us through a Son, whom he appointed to be the heir of all things. It is through him that God also made the universe. He is the brightness of God's glory,

the exact representation of his being. He even holds everything together by the word of his power. After he had made cleansing for sins, he sat down at the right hand of the Majesty on high" (Hebrews 1:1–3).

Genesis 1 begins with the creation. It reveals that God established the dominion covenant with mankind. This covenant reveals a God who is plural: "Let us." This is the first indication in Scripture of the doctrine of the Trinity. The Gospel of John begins with the identification of the Creator: the Word. This is the Second Person of the Trinity. He created the universe. Paul echoed this doctrine of creation: "The Son is the image of the invisible God. He is the firstborn of all creation. For by him all things were created, those in the heavens and those on the earth, the visible and the invisible things. Whether thrones or dominions or governments or authorities, all things were created by him and for him" (Colossians 1:15–16).

In this system of ownership, the Second Person of the Trinity, incarnated in history in the Person of Jesus Christ, acts as God's steward in history. He is a perfect man. He is the covenantal replacement of Adam after Adam's rebellion. He is the lawful heir. Jesus made this clear in His parable of the thieving stewards. "After that, the owner sent his own son to them, saying, 'They will respect my son.' But when the vine growers saw the son, they said among themselves, 'This is the heir. Come, let us kill him and take over the inheritance.' So they took him, threw him out of the vineyard and killed him. Now when the owner of the vineyard comes, what will he do to those vine growers?' They said to him, 'He will destroy those miserable men in the most severe way, and will then rent out the vineyard to other vine growers, men who will give him his share of crops at the harvest time'" (Matthew 21:37–41). [North, *Matthew*, ch. 43]

He builds up the kingdom in history. Then He will transfer it to the Father at the end of time. "Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For 'he has put everything under his feet.' But when it says 'he has put everything,' it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (I Corinthians 15:24–28). [North, *First Corinthians*, ch. 17] At that point, God the Father will transfer this inheritance to the church: the

bride price. I discuss this in Chapter 47.

This is the biblical model of stewardship. It begins with a hierarchy of authority within the Godhead. God the Father delegated to the Son the task of creation. After Adam's fall, God the Father assigned to the Son the task of redemption. Redemption is not simply the redemption of souls. It is the redemption of the fallen world. It involves buying back the fallen world. This is done by Christians on behalf of Christ, and in the name of Christ. This is hierarchical: covenant-keepers are under Christ, and Christ is under God the Father. At the end of time, Christ hands the redeemed world back to God the Father. This is footstool theology. It involves economics. It is a matter of ownership. This program of economic redemption is the fulfilment of Adam's task of dominion. It will end history.

What follows history? The marriage supper of the lamb. "Then I heard what sounded like the voice of a great number of people, like the roar of many waters, and like loud crashes of thunder, saying, "Hallelujah! For the Lord reigns, the God who rules over all. Let us rejoice and be very happy and give him the glory because the wedding celebration of the Lamb has come, and his bride has made herself ready. She was permitted to be dressed in bright and clean fine linen (for fine linen is the righteous acts of the saints)" (Revelation 19:6–8). At that time, God the Father will endow the church with the bride price. It will be her inheritance in eternity. The bride price was a dowry under the Mosaic law (Exodus 22:16–17) and even before. Shechem offered to pay a bride price to Jacob if Jacob would allow him to marry Dinah (Genesis 34:11–12). Legally, it was paid to her by her father, but the groom paid her father this dowry. The transfer of the money accompanied the transfer of covenantal authority over her from her father to the bridegroom. Because the bridegroom paid this dowry, the inheritance of her brothers was not depleted. In the case of the church, the bride price to God the Father will be paid by Jesus. "When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (I Corinthians 15:28). God the Father then will transfer this dowry to the church. In this way, the total inheritance of history will be transferred to the church. It will serve as capital for the continuation of the dominion covenant in the new heaven and new earth (Revelation 21, 22).

The dominion covenant is eternal. Eternity will not be endless consumption. There will be much to learn. Members of the church will learn by

doing in eternity, just as they do today. "Be doers of the word and not only hearers, deceiving yourselves. For if anyone is a hearer of the word but not a doer, he is like a man who examines his natural face in a mirror. He examines himself and then goes away and immediately forgets what he was like. But the person who looks carefully into the perfect law of freedom, and continues to do so, not just being a hearer who forgets, this man will be blessed in his actions" (James 1:22–25). This will be true in eternity, just as it is true in history.

A. Trinity: Ontological and Economic

Orthodox Christianity teaches that God is one. It also teaches that this God is in three Persons. These Persons possess equal ultimacy. None of them is less God than the others. The Nicene Creed (325 AD) says of Jesus that He is "the Son of God, begotten from the Father, only-begotten, that is, from the substance of the Father, God from God, light from light, true God from true God, begotten not made, of one substance with the Father, through Whom all things came into being, things in heaven and things on earth." The revision of Constantinople (381 AD) added this regarding the Holy Spirit: "who for us men, and for our salvation, came down from heaven, and was incarnate by the Holy Ghost and of the Virgin Mary, and was made man." This was the early church's challenge to the heresy of Arianism, which made Christ a created being, and therefore not originally divine. From the standpoint of economic theory, this doctrine implies that *ownership is simultaneously one and many*: one God, three Persons. Not one of the Persons of the Godhead is a subordinate owner. God possesses lawful title to everything.

Orthodox Christianity also acknowledges a subordination of function within the Godhead. Theologians call this the economic Trinity. The idea here is the original Greek word, *eco*: family. There is a division of labor among the Persons. God the Father was not incarnate in history. Jesus said: "No one has seen God at any time. The one and only God, who is at the side of the Father, he has made him known" (John 1:18). "It is written in the prophets, 'Everyone will be taught by God.' Everyone who has heard and learned from the Father comes to me. Not that anyone has seen the Father, except he who is from God—he has seen the Father" (John 6:45–46). Jesus represents the Father as a trustee. "All things have been entrusted to me from my Father; and no one knows the Son except the Father and no one

knows the Father except the Son, and anyone to whom the Son chooses to reveal him" (Matthew:11:27).

Christians must uphold both aspects of the doctrine of the Trinity: ontological and economic. They must affirm that God is one. They must also affirm that God is many. This is basic Trinitarian doctrine. They must affirm the equal ultimacy, meaning equal sovereignty, of the three Persons. But this sovereignty is manifested in a hierarchical system of authority. The Son represents the Father. So does the Holy Spirit. At the Last Supper, Jesus said: "I have many things to say to you, but you would not understand them now. But when he, the Spirit of Truth, comes, he will guide you into all the truth, for he will not speak from himself. But he will say whatever he hears, and he will tell you things that are to come" (John 16:12–13). (The Western Church affirms that the Spirit is sent by the Father and the Son. This is known as the Filioque clause: "and from the Son." This was proclaimed at the third council of Toledo in 589.)

How does this affect economic theory? First, it insists that ownership is both corporate (one) and individual (many). This means that purely individualistic ownership is incorrect, as is full state ownership. Second, with respect to the subjective imputation of economic value, this imputation is both individualistic and corporate. When God evaluated His work at the end of the days of creation, this imputation was both unified and plural. There was agreement among the Persons of the Godhead that the work was good. Because a sovereign God made this evaluation, it was objectively true. It was a matter of sovereign opinion.

B. Division of Labor

Adam Smith began *Wealth of Nations* (1776) with three chapters on the division of labor. He was impressed by the greater productivity that is made possible through specialization. Specialization requires coordination. It also requires interdependence. Specialization and independence are necessary for human society. The Trinity is the model of this outlook. Three Persons coordinated production. This was not their response to scarcity. They could have jointly created the universe, but they did not. They had joint purposes. They had a joint plan. When it came time to create man, they jointly concluded "let us." There was no need for a market system of exchange for them to reconcile their plans. There was no give and take required to lay out their plans. No Person of the Godhead had to give up

something of value in order to gain something of value. But there was specialization. There was plan coordination.

Had he been a self-conscious covenant economist, Smith would have used the five points to structure his presentation. He should have devoted part of Chapter 1 to God's original ownership: point one. Then he should have discussed stewardship: point two. This would have placed ownership at the heart of his analysis: original ownership followed by delegated ownership. If he had begun with Trinitarian ownership, he could have discussed the foundations of the division of labor early in his book in Chapter 3. That would have been point three. As a mild deist, none of this occurred to him. His god was unitarian, as we can see in *The Theory of Moral Sentiments* (1759). In contrast, the God of the Bible did use the division of labor in the creation week. He did not do this to overcome limits imposed by scarcity. He did it to reflect His character.

Smith's focus from the beginning of *Wealth of Nations* is point three: the division of labor. He did not understand the creation week. The creation week established a pattern for mankind: cooperation (point three) through hierarchy (point two). Smith's hypothetical pin factory was hierarchical, though he never discussed this. Someone owned it. Someone managed it. This hierarchy managed the division of labor. God in the creation week reflects this. The Son created under the Father's authority. The creation therefore testifies to a God who is both one and many. There is communication among the Persons of the Godhead. There is talk. Talk is also basic to humanity. This is why the destruction of communications at the tower of Babel divided mankind after mankind attempted to speak with one voice to commit evil. In response, God once again said: "Let us." "The Lord said, 'Look, they are one people with the same language, and they are beginning to do this! Soon nothing that they intend to do will be impossible for them. Come, let us go down and confuse their language there, so that they may not understand each other'" (Genesis 11:6–7).

The free market is the product of coordination. It is not centralized coordination. It is a matter of voluntary cooperation. It is coordination by prices, which are established by competitive bidding. High bid wins. Coordination by bidding is far less true in families, churches, and civil governments. There, cooperation is based on mutual obligations that are enforced by a chain of command. The church will extend into eternity. The family and civil government will not. There will still be cooperation in eternity: the

new heaven and new earth (Revelation 21, 22). There will be no cooperation in the lake of fire (Revelation 20:14–15). There will be no human action. There will be no dominion.

Point three of the covenant establishes boundaries: judicial and ethical. The human division of labor involves interdependence. It involves uncertainty. No one can be certain of the performance of others in the production process. People must trust each other. None of this applies to the three Persons of the Trinity. They have exhaustive knowledge of each other: past, present, and future. There is no uncertainty. So, they can trust each other completely. They honor each other's tasks and therefore their *operational boundaries* in their relations downward toward the creation and upward toward God the Father. The Spirit was involved with the creation on day one: "The earth was without form and empty. Darkness was upon the surface of the deep. The Spirit of God was moving above the surface of the waters" (Genesis 1:2). So, the conceptual categories of the division of labor apply to the Godhead. This makes Trinitarian economics fundamentally different and conceptually different from all rival economic theories.

Point four is judgment. In economics, this is the imputation of value. God imputes economic value collectively and individually: one and many. So does mankind. The Godhead imputes economic value subjectively. So do individuals. The difference between God's imputation and mankind's is that His imputation is objective because He is absolutely sovereign. This is not simply a matter of opinion. This objectivity is the basis of mankind's objective value. Mankind's imputation is not exclusively nominalistic. The opinions of others shape the outcome, mainly through competitive monetary bidding. This is not true of the Godhead.

Point five is succession: linear history. The creation week is the model. It had sequence: days one through seven. God could have created the universe personally and purposefully in one instant, analogous to the way that cosmic evolutionists say that the infinitely dense pre-Big Bang "stuff" impersonally and purposelessly created the universe through "inflating."[1] But

1. The 2019 Wikpedia entry for "Big Bang" reads: "In physical cosmology, cosmic inflation, cosmological inflation, or just inflation, is a theory of exponential expansion of space in the early universe. The inflationary epoch lasted from 10^{-36} seconds after the conjectured Big Bang singularity to some time between 10^{-33} and 10^{-32} seconds after the singularity. Following the inflationary period, the universe continues to expand, but at a less rapid rate." In laymen's language, this was instantaneous.

He didn't. Neither does man. Man's creativity is sequential: purpose, plan, cooperation, entrepreneurship, and capital accumulation.

C. Covenants and Contracts

There are five oath-bound covenants in history: dominion, individual, family, church, and state. I cover this in detail in *The Covenantal Structure of Christian Economics*. The ethical stipulations for each of these covenants are binding on those who affirm it, whether personally or through legally authoritative representation (trusteeship). So are the covenant's judicial sanctions. This means that God's delegation of ownership to families, churches, and civil governments is valid. Biblical covenant theology therefore denies the fundamental premise of anarchism, including anarcho-capitalism, namely, the illegitimacy of civil government. All branches of the Christian church have always insisted on this. The phrase "Christian anarchism" is an oxymoron: an inherently self-contradictory statement or idea.

Covenants are established by oath under God's authority. This hierarchical structure of judicial authority is established and enforced by a God who is both one and many. In four of the five covenants, covenant-makers are both individual and corporate. Marriage vows are plural under God. Church membership in the New Testament church was plural. The head of a household spoke judicially in the name of those under his covenantal authority. He was God's designated trustee. We know this from the story of the Philippian jailer. "The jailer called for lights and rushed in and, trembling for fear, fell down before Paul and Silas, and brought them out and said, 'Sirs, what must I do to be saved?' They said, 'Believe in the Lord Jesus, and you will be saved, you and your house.' They spoke the word of the Lord to him, together with everyone in his house. Then the jailer took them at the same hour of the night, and washed their wounds, and he and those in his entire house were baptized immediately" (Acts 16:29–33). Fathers under the Abrahamic covenant circumcised their newborn sons on the eighth day. This was a legally binding oath-sign. Churches that baptize infants—the overwhelming majority of churches in history—allow a parent to act as a legal spokesperson (trustee) for children, who are baptized by the church. With respect to the state, there are public oaths of loyalty to the nation when citizens are naturalized and when citizens are sworn in as jurors or military members.

An institution sealed by a covenantal oath has the right to own property. This is representative of other collective agencies. Ownership is not

limited to covenantal institutions. Contractual institutions also have the right to own property. This establishes the concept of *representative ownership*. Designated agents of the organization act legally in the name of the organization (trusteeship). They also act on behalf of the organization (stewardship).

Representative agents of corporate members act in terms of subjectively imputed economic value. These agents impute value to assets, but always as legal agents (trustees). They are not supposed to impute value solely on their own behalf. They have fiduciary authority, which is legal authority. It involves responsibilities to the owners who are represented. The *Merriam-Webster Dictionary* defines fiduciary. "Fiduciary relationships often concern money, but the word *fiduciary* does not, in and of itself, suggest financial matters. Rather, fiduciary applies to any situation in which one person justifiably places confidence and trust in someone else and seeks that person's help or advice in some matter. The attorney-client relationship is a fiduciary one, for example, because the client trusts the attorney to act in the best interest of the client at all times. *Fiduciary* can also be used as a noun for the person who acts in a fiduciary capacity, and *fiduciarily* or *fiducially* can be called upon if you are in need of an adverb. The words are all faithful to their origin: Latin *fidere*, which means 'to trust.'"

There are no numerically measurable objective standards of economic valuation available to economic actors: "exactly this much more or less value." In human affairs, economic value is subjective. It is imputed. But Christian economic theory also insists that *economic valuation, while subjective, is not purely subjective*. Why not? Because the Trinity imputes economic value to every asset and every action. This imputation is objective, even though it is imputed subjectively. God is sovereign. Therefore, His subjective imputation has objective value. This imputation is the standard by which every person's economic valuations will be judged objectively on judgment day. It is each person's responsibility to impute value according to God's standards, but imperfectly as a creature. This preserves Christian economics from the cacaphony of nominalism: "every man for himself." This is why it is possible for organizational policy-makers to come to a decision about the right things to do and also how to do things right. People are capable of making interpersonal comparisons of subjective utility in family, church, and state. This is denied in theory by strict nominalism, not just with respect to economic valuation, but to all valuation. The famous asser-

tion of this position is Chapter VI of Lionel Robbins' *Essay on the Nature and Significance of Economic Science* (1932). He was at the time an intellectual disciple of Ludwig von Mises. He was a strict nominalist. But he abandoned this position in 1938 in his debate with Roy Harrod in *The Economic Journal*. He never put the pieces together: subjective nominalism, but with sufficient objective realism mixed in to enable political policy-makers to use economic theory to guide them in discovering an optimum valuation of the competing subjective valuations of society's members. Neither has any other humanistic economist. The epistemological problem is ignored.

Conclusion

Ownership is theocentric. It is Trinitarian, but it is uniquely Christocentric in history. The Second Person of the Trinity created the world and has redeemed it. Administering it as a judicial trustee and as an economic steward is His responsibility forever. Why? Because He is the cosmic Owner. Ownership is always judicially connected to responsibility.

Trinitarian ownership sends a warning to individualists and collectivists: neither organizational system can work. It sends a message to nominalists and realists: neither theory of mankind's imputation of economic value is true. It sends a message to defenders of a mixed economy: there can be no theoretical or operational resolution of individualism and collectivism that is based on the doctrine of the autonomy of man. Always, some covenant-breaking owners will seek to play God, either through the market process (wealth) or centralized economic planning (power). There will be more attempts to build a tower reaching to heaven.

12

INITIAL DISTRIBUTION

God said, "Let us make man in our image, after our likeness. Let them have dominion over the fish of the sea, over the birds of the sky, over the livestock, over all the earth, and over every creeping thing that creeps on the earth." God created man in his own image. In his own image he created him. Male and female he created them. God blessed them and said to them, "Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth." God said, "See, I have given you every plant yielding seed which is upon the surface of all the earth, and every tree with fruit which has seed in it. They will be food to you. To every beast of the earth, to every bird of the heavens, and to everything that creeps upon the earth, and to every creature that has the breath of life I have given every green plant for food." It was so (Genesis 1:26–30).

Analysis

I have called this declaration by God the dominion covenant. Mankind was not yet in existence, but these words are binding on mankind. *God spoke representatively for mankind*. As Creator, He had this right of representative covenantal declaration. The dominion covenant defines mankind. It identifies each person as made in God's image. But it also identifies unified mankind as made in God's image. This image is both unified and plural because God is both unified and plural: "Let us." This is Trinitarian theology. It is Trinitarian social theory. It is Trinitarian economic theory. God is both one and many; mankind is both one and many.

God's declaration established a hierarchy: God > man > nature. Mankind (collective) is in charge of nature because people and institutions are God's agents. "God blessed them and said to them": the word "them" is plural. Mankind represents God to nature, and nature to God. This representation is both legal (trusteeship) and economic (stewardship).

This passage means that all worldviews that are based on pantheism, meaning the equality of God and nature, are wrong. It also means that all forms of pantheism that place nature on an equal status with mankind are wrong. Nature is subordinate to mankind. Nature's resources therefore belong to mankind. This is a matter of *delegated ownership*. God is the cosmic Owner of the universe because He is its Creator. "The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers" (Psalm 24:1–2). [North, Psalms, ch. 5] God delegated ownership to mankind. This ownership is governed by God's purpose for the creation, which is redemptive. "Blessed be the God and Father of our Lord Jesus Christ, who has blessed us in Christ with every spiritual blessing in the heavenly places, even as he chose us in him before the foundation of the world, that we should be holy and blameless before him. In love he predestined us for adoption to himself as sons through Jesus Christ, according to the purpose of his will, to the praise of his glorious grace, with which he has blessed us in the Beloved" (Ephesians 1:3–6, English Standard Version).

In the declaration given to Adam personally, there was a law (point three) with a negative sanction (point four) attached. "The Lord God took the man and put him into the garden of Eden to work it and to maintain it. The Lord God commanded the man, saying, 'From every tree in the garden you may freely eat. But from the tree of the knowledge of good and evil you may not eat, for on the day that you eat from it, you will surely die'" (Genesis 2:15–17). The supreme covenantal issue was obedience (point two). God placed a legal boundary (point three) around a tree. This tree had a specific characteristic. Its fruit provided ethical knowledge. This placed ethics (point three) at the center of the covenant. But it also placed knowledge (point four) at the center. Knowledge in this case is the ability to render judgment. This meant the ability to *declare judicially* good or evil: "not guilty" or "guilty." This meant the *subjective imputation of meaning*.

I identified allocation as the second analytical economic category (Chapter 7). The dominion covenant specified the terms of the initial allocation of capital. This was the initial distribution. It was corporate: the distribution of the earth to mankind. But, from the beginning, God dealt on an individual basis with Adam. First there was grace: the distribution. Then there came law: a task. God assigned Adam a specific task: naming the animals of the garden. This is the pattern: *grace precedes law*. But law always

follows. Soon after the initial distribution came a specific responsibility. Only after that task was completed was a second distribution made by God: a wife. There was payment required: a rib. It was not a zero-price distribution. This was the advent of the price system. Adam learned that there are no free wives. There are also no free lunches.

After the temptation, Adam wanted additional authority. This would mean additional responsibility. He had already named the animals and his wife. He had the preliminary ability to assess meaning or function and then verbally declare the results of his imputation. But this ability did not yet include ethics. This was a missing piece of his being, he thought. He did not want to wait. He could have eaten from the tree of life, thereby ending on God's judicial terms the threat of the negative sanction of death, but he refused. He went straight for the forbidden fruit after his wife tested God's word by eating and surviving.

The story of the representative fall of mankind reveals that Adam's lust was not the desire to accumulate wealth. He already owned the entire creation, except for one tree. Rather, he wanted to possess *specialized knowledge*. He wanted to know good from evil. He committed evil in order to gain this knowledge. He rebelled against God's covenantal hierarchy by means of an invasion of God's legal boundary, which was a boundary of ownership: "No Trespassing." Here is my point: *the original desire to steal was based on a quest for specialized knowledge, not wealth*.

God did not need additional knowledge. He is omniscient. This is an incommunicable attribute of God. Man will never be omniscient. Adam wanted more knowledge than God had distributed to him. This limitation vexed him. He was discontented with God's initial distribution. He was also discontented with the sequential pattern required for him to gain more knowledge. He wanted more knowledge at a below-market price. But there are no free lunches. There is no free knowledge. He did not want to pay the price: labor, learning, and time. He decided to gain additional knowledge on his own terms. The terms were ethical: theft.

Greater knowledge would bring with it greater responsibility. He did not want to work in order to gain the ability to deal with this added responsibility. He wanted instant responsibility. He gained it. But he was unable to deal with it covenantally. He sewed fig leaves rather than going straight to the tree of life. He was expelled from the garden after his trial and sentencing by God.

The fall of man set the pattern for mankind's subsequent revolts: *the quest for premature knowledge*. Knowledge brings power. Men want power. This power is the power to judge and then convict: point four. We call the evaluation process judgment. We call the declaration of guilt or innocence judgment. We call the imposition of sanctions judgment. *To gain the power to impose sanctions, men must seek and accumulate knowledge*. Covenant-keepers who wish to shape the future must gain authority by means of knowledge, which includes wisdom: decision-making. They may gain wealth, but their purpose for this wealth is supposed to be accumulation of responsibility. The essence of covenant-breaking man's rebellion is his discontent with God's initial distribution of wealth, but wealth of a specific kind: *knowledge that leads to autonomous power*.

The supreme model of this pattern of rebellion in modern times was the Russian Communist revolutionary Josef Djugashvili, who took an alias, as did other senior Bolsheviks. He called himself Stalin: the Russian word for steel. He became a Communist in 1899. He moved from organizing public protests and strikes to organizing a major crime in 1907. His gang robbed a convoy taking money to the Imperial bank of Tiflis, killing 40 people. He did not keep this money, which was a fortune. He used it to further revolution in the name of Karl Marx. Yet he had begun his life's calling a decade earlier as a seminary student in Tiflis. Then he switched his theology of personal and social redemption by the shed blood of Christ to Marx's religion of revolution: personal and social redemption by the shed blood of the bourgeoisie in a proletarian revolution. He had greater knowledge of the covenantal truth of Christianity than any of the other Russian Communist leaders did. He was truly self-conscious, just as Marx and Engels were self-conscious: converts from Christianity.

A. Adam and Crusoe

Most people cannot follow long chains of reasoning. Among those who can follow them, most of them are unable to remember all of them in the correct order. Even if they could, it would not help. They could not persuade most listeners by means of their recitation of these chains of knowledge. (Consider the 20 principles of covenantal economics, meaning five times four, with three words each, in Chapter 2.)

The Bible overcomes this limitation by the use of historical stories. The strictly theological books of the Bible are rare. The wisdom literature—

Psalms, Proverbs, Ecclesiastes—are Old Testament exceptions. The epistles in the New Testament are exceptions. Jesus' parables are made-up stories in the midst of historical narratives.

1. A Teaching Technique

It is common for economists to begin their analyses of scarcity with a version of Robinson Crusoe, the character in the first English novel, published in 1719. They present a picture of a man on a deserted island. He makes choices about the allocation of scarce resources among competing ends, such as whether to spend time building simple tools to increase his consumption. Tool-building temporarily forces him to reduce his present consumption of food that he has been harvesting by less efficient methods. To get more food in the future, he must consume less food while he builds tools. They explain his planning in terms of his desire for greater consumption. In short, they see him as a worshipper of mammon: more for me in history. They see production as being driven ultimately by consumption. This was Adam Smith's view. It is not the Bible's view. Production is for the sake of building the kingdom of God (Matthew 6:33). [North, *Matthew*, ch. 15]

To use the story of Crusoe as a way to connect with readers is a good teaching technique. But the economists do not consider Crusoe as a person. He is an abstraction. This abstraction is unrealistic. The economists' Crusoe makes plans and choices. He has knowledge. They never ask this: "Where did he get it?" He has experience with planning and the use of tools. They never mention that *Crusoe is the heir of an entire civilization*. Most of all, he is responsible to God. The author of the novel was a Christian. He presented Crusoe as a man in rebellion against God, a man who sought autonomy from his family, and who is punished for this, as Crusoe fully understood. The economists' Crusoe has no guilt, no responsibility before God, and no thought about getting off the island. He is an abstraction from history.

The Bible is not based on abstractions from history. It is filled with narratives. These are historical stories. They are true stories. The story of stories in the Old Testament is the story of Adam's transition from grace to wrath. God wants His people to begin with this story in order to understand what we have lost and how we lost it. We are also to discipline our thoughts and our lives in terms of another story, the supreme story in the New Testament. This is the story of the second Adam, who Paul called the last Adam: Jesus Christ, the Redeemer. "So also it is written, 'The first man Adam became a

living soul. The last Adam became a lifegiving spirit. But the spiritual did not come first but the natural, and then the spiritual. The first man is of the earth, made of dust. The second man is from heaven. Just as the one made from dust is, so also are those who are made of the dust, and as the man of heaven is, so also are those who are of heaven. Just as we have borne the image of the man of dust, we will also bear the image of the man of heaven" (I Corinthians 15:45–49). *This is the story of the transition from wrath back to grace*. This grace is judicial and historical. It has three aspects: definitive (imputed), progressive (developed), and final (consummated).

For covenant-keepers, there will be covenantal continuity from the final judgment into eternity. *Mankind's accumulated capital will become the church's inheritance in the new heaven and new earth*. History therefore has meaning. This meaning has to with progress: extending the dominion covenant. It is the restoration of the world we have lost—not just the pre-fall garden but the world that sinless mankind would have built. That lost world was the economic cost of sin, individually and corporately. The economic aim of Christ's redemption—His buying back—is the restoration of something economically comparable to that lost world. To argue otherwise is to argue implicitly that Satan's plan will be successful in thwarting the fulfilment of the redemption phase of the dominion covenant. This is an implicit argument that Christ's redemption—definitive, progressive, and final—is not comprehensive. But it is.

2. The Grace of Knowledge

The basis of this extension of the dominion covenant is grace: a gift of God to those who do not merit it. *This grace involves a world-transforming increase in knowledge*. This pattern began in the garden, where there was an increase of knowledge. Adam named the animals. He learned. This was technical knowledge. This was not the primary form of knowledge in the garden, nor is it today. The primary form of knowledge is ethical: the knowledge of good and evil. The serpent did not lie about the fact that they would become as God, knowing good and evil. Rather, he lied about the cost of obtaining these facts through Satan's way: by committing an act of theft. "You will surely not die" (Genesis 3:4b). Adam and Eve did not become God, but they became as God or like God. They learned first-hand about good and evil, just as the serpent promised. They took this knowledge with them from the garden. They transmitted this knowledge to their heirs, who are

also learning about good and evil. This is why economic theory is not ethically neutral (value-free). Nothing that man knows is ethically neutral.

Here, I continue the economists' tradition of explaining the workings of the economy by beginning with a man alone in an unfamiliar setting. But, unlike Crusoe, Adam was a man with no experience. Yet he had knowledge. He had received it as a created being in God's image. More importantly, he received knowledge directly from God through verbal revelation. This was God's grace to Adam. Then shortly after grace came law. His knowledge made him responsible to a degree that Eve was not, since God did not speak to her face to face.

God gave Adam the whole world, except for one tree. This was grace. But the greatest grace that God showed to Adam was His verbal revelation. God's verbal revelation is the supreme tool of dominion—not technical knowledge. This knowledge was encapsulated in this statement: "The Lord God commanded the man, saying, 'From every tree in the garden you may freely eat. But from the tree of the knowledge of good and evil you may not eat, for on the day that you eat from it, you will surely die'" (Genesis 2:16–17). [North, *Genesis*, ch. 9] This was an ethical command. Specifically, it was a command against theft. Had they obeyed it, this would have made Adam and his heirs rich. It would have enabled them to make the earth fruitful beyond anything conceivable by Adam. But they did not obey it. They learned the hard way about God's negative sanctions.

The garden was part of the world we have lost: the initial distribution. But we have also lost the world that would have developed outside the garden in sin-free history. The preeminent social question in the post-fall world is this: "Is there a guide by which humanity can build that post-garden world, the world that could have been, but never was?" The answer is the same as it was in the garden: *God's verbal revelation*. Paul wrote this: "So faith comes from hearing, and hearing by the word of Christ" (Romans 10:17). There is a supreme economic principle undergirding this restoration: "You must not steal" (Exodus 20:15). [North, *Exodus*, ch. 28] That was the supreme economic rule in the garden.

My exposition here explains why Christian economics is covenantally different from non-Christian economics. This is why its analytical categories have a different structure and emphasis. This is why it starts with ownership, a judicial category, not scarcity, an economic category.

B. Ownership and Responsibility

Because the forbidden tree had to do with ethical knowledge, a Christian economist should place ethics at the center of economic analysis. In Chapter 3, I argued against humanistic economics' assertion of value-free economic theory. Nothing is value-free, including economic theory. Economists, beginning with the mercantilists of the late 1600s, have insisted on this presupposition: value-free economics. The mercantilists substituted mathematics and statistics for ethics, as William Letwin demonstrated in *The Origins of Scientific Economics* (1963). Adam Smith and his disciples substituted logic and history for mathematics and statistics, but they did not openly import ethics in their analysis. Modern economics has returned to the mercantilists' methodology. Economist Fritz Machlup in 1956 referred to this as *metromania* and *mathematosis*. This affliction is far worse today than in 1956, both in its intensity and its range of applications.

I have said that we should begin with ownership as the judicial starting point of economic theory. Ownership is inherently ethics-based. It announces *legally enforceable boundaries* around specific pieces of property. These *legal immunities* are grounded in morality. Legally rightful ownership is morally rightful ownership. Ownership is not limited to physical assets. Economists sometimes refer to ownership as a bundle of legal rights. It involves the right of control over designated resources in designated ways. It is above all the *legal right of exclusion*. This is a legally transferrable right.

Every judicial declaration has an ethical foundation. Christian economics begins with God's legal declaration: "You must not steal." The correct judicial starting point—ownership—has five analytical components: God's redemptive purpose, man's allocation responsibilities, ethics, historical sanctions, and a transfer of ownership to designated heirs. This is an analytical package. It is covenantal. Point two rests on this analytical principle: *responsibility*. Man's ownership is not autonomous. It is also not value-free. It rests on ethics.

I am arguing that the economic concept of *ownership* cannot accurately be separated analytically from man's legal responsibility: *trusteeship*. I am also arguing that trusteeship carries with it an economic category: *stewardship*. The legal category is superior to the economic category. *This is why in all Christian economic theory, there must be a theory of a non-market civil government above the market process*. Civil government is covenantal. God

established it to protect owners from unlawful invasions. *Ownership always implies the legal right of exclusion*. This goes back to the forbidden tree. Adam and Eve were judicially excluded by God. This was an aspect of the covenant's hierarchy (point two). They invaded the lawful boundary of God's tree. They rebelled against a legitimate hierarchy of authority. God imposed negative sanctions (Genesis 3). These were sanctions from outside the market order.

Adam and Eve were legally responsible for their actions. They were subject to a hierarchical system of sanctions. So was nature: "cursed is the ground because of you" (Genesis 3:17b). [North, *Genesis*, ch. 12] Paul wrote: "For the creation was subjected to futility, not of its own will, but because of him who subjected it, in the certain hope that the creation itself will be delivered from slavery to decay, and that it will be brought into the freedom of the glory of the children of God. For we know that the whole creation groans and labors in pain together even now" (Romans 8:20–22). [North, *Romans*, ch. 5] Analytically speaking, *any attempt to separate ownership from personal responsibility is an implicit assertion of man's autonomy*. Ownership in the biblical framework is inseparably connected to responsibility.

C. Delegated Ownership

This section is long. It covers a lot of material. This material has significant implications for economic theory. It also has significant implications for political theory. I cover ten topics: ownership, knowledge, responsibility, capital, specialization, opportunities, cooperation and competition, pricing, profitability, and inheritance.

1. Ownership

God is the cosmic Owner because He created the universe. This is the theological foundation of the starting point for Christian economic theory: original ownership. This is point one of the biblical covenant: God's sovereignty.

Man is not originally sovereign, but he is *derivatively sovereign*. I call this *authority*. This is point two of the biblical covenant. Authority has to do with hierarchy. As I have written in the previous chapter, the Second Person of the Trinity was the Creator. This is a hierarchy: economic Trinity. The Son serves God the Father as a trustee in relation to the creation. The Second Person was incarnated as a man, Jesus Christ. He is now seated at the

right hand of God, a position of judgment. Paul wrote: "In my prayers I ask that you may know the incomparable greatness of his power toward us who believe, according to the working of his great strength. This is the same power that God worked in Christ when he raised him from the dead and seated him at his right hand in the heavenly places. He seated Christ far above all rule and authority and power and dominion, and every name that is named. Christ will rule, not only in this age, but also in the age to come. God put all things under Christ's feet and gave him to the church as head over all things" (Ephesians 1:19–22). This is the basis of covenant theology's theory of authority/hierarchy. Man represents God in relation to the creation. Christ, the resurrected and ascended perfect man, is the supreme representative in history and in the eternity to come.

In one sense, delegated ownership is point two: stewardship. But delegated ownership has characteristics of point one: delegated sovereignty. As was the case with God in the creation week, *man's creativity is associated with ownership.* When a person makes an item, he has a legal claim to it. This is the meaning of property: a legal claim to specified goods. There are legal boundaries around this property (point three). This is why point three (property) is covenantally related to point one (ownership) and point two (stewardship).

Ownership is legal (point three). There is an enforceable legal bond between a specific asset and a specific owner. But this bond is always established and defended by a legal hierarchy: point two. It is a matter of trusteeship. God has delegated ownership to mankind as His trustee. This trusteeship is personal. Adam and his heirs were designated by God as owners of the earth. To argue that God did not do this is to deny biblical truth. To argue that there is no covenantal connection between this initial distribution of ownership and today's distribution is necessarily to place property rights on some other legal basis than day six of the creation week. I cover this in greater detail in the next chapter.

Here is the crucial economic point in this Section 1: *all ownership in history rests on the dominion covenant*. This covenant was manifested in the initial distribution of ownership. Ownership is a covenantal concept. The concept of ownership is an inescapable concept. It is never a question of the covenantal basis of ownership vs. a non-covenantal basis of ownership. It is always a debate over the God of the covenant and His representative agents.

2. Knowledge

God created Adam with enormous knowledge. Adam named all the animals of the garden that God brought to him. This was not simply naming them as we name our children. Rather, he classified them on some conceptual basis.

He understood language. He understood it well enough to understand the legal terms of the covenant. Modern biological evolutionists follow the lead taken by eighteenth-century Scottish Enlightenment theorists who explained the origin of language as an evolutionary process. Men supposedly learned language in stages. Prior to language, they grunted and pointed. Adam Smith, in the final section of *The Theory of Moral Sentiments* (1759), discussed this. (Rarely is the full title of the book cited, for good reason: *The Theory of Moral Sentiments; or, An Essay towards an Analysis of the Principles by which Men naturally judge concerning the Conduct and Character, first of their Neighbours, and afterwards of themselves. To which is added, A Dissertation on the Origins of Languages*.) In the first paragraph of the final chapter, Smith wrote this: "Two savages, who had never been taught to speak, but had been bred up remote from the societies of men, would naturally begin to form that language by which they would endeavour to make their mutual wants intelligible to each other, by uttering certain sounds, whenever they meant to denote certain objects." The argument is preposterous. *The social division of labor requires a complex language.* This is the social message of the biblical story of the tower of Babel (Genesis 11). Mankind would not have survived apart from the social division of labor. This is the familiar "chicken or egg" argument. Which came first? It is answered in Genesis 1.

Adam was tempted by the lure of prohibited knowledge: violating the judicial boundaries of the tree of knowledge of good and evil. He possessed all other earthly assets, so they were not matters of temptation. *Man's lack of knowledge was the key element in the temptation.* Adam wanted special knowledge that God possessed. He wanted it immediately. This knowledge was associated with rendering judgment: power.

We are told that knowledge is the way to wealth. "Through wisdom a house is built and by understanding it is established. By knowledge the rooms are filled with all precious and pleasant riches" (Proverbs 24:3–4). Modern man has learned that accurate knowledge is the most valuable

scarce resource. With this, men can gain both power and wealth. *The capital markets are primarily markets for the purchase and sale of knowledge.* These markets are manifested by money prices. A price is the objective outcome of competing bids for ownership, which in turn are based on competing knowledge. If an entrepreneur knows the price of any marketable resource in advance, he can get rich. He may not bother to take delivery of the resource. He can make his fortune in the commodity futures market, a market legally tied to commodities but in fact tied to the ownership of money. Almost no one takes delivery of the commodity that he buys with an ownership contract, which is what a futures contract is. He instead sells this ownership and collects money. In entering into a contractual arrangement, he is interested only in gaining ownership of more money, not the ownership of a specific quantity of a specific commodity. *Accurate knowledge is his key to making money, not using the commodity in a production process.*

The primary social benefit of the commodity futures markets is not the allocation of physical property. Rather, it is the benefit of gaining access free of charge to knowledge regarding the correct prices of these commodities, as determined by experts in pricing who buy and sell the contracts for physical goods. *This is the greatest social benefit of capital markets.* Individuals take on the uncertainty of specific ownership for the sake of personal profit. Society gets the benefit of their expert knowledge at close to zero cost simply by monitoring these widely reported transaction prices. *Private ownership and private profit or loss convey great social benefits at close to zero cost.* This is another example of the harmony between individual self-interest and public interest. This harmony was what Adam Smith argued for in *The Wealth of Nations.*

3. Responsibility

Legal responsibility is established by ownership. *Legal title conveys legal responsibility.* The ownership of knowledge is central to legal responsibility. God held Adam more responsible for sin than Eve was. Adam had greater knowledge. God had told him face-to-face about the forbidden tree. God did not speak directly to Eve. She was more easily deceived. Paul wrote: "Adam was not deceived, but the woman was deceived and became a transgressor" (I Timothy 2:14). Similarly, the case law in Exodus regarding the ownership of a dangerous animal rests on this idea: ownership of an animal establishes the presumption of specialized knowledge about its

behavior. "If an ox gores a man or a woman to death, the ox must surely be stoned, and its flesh must not be eaten; but the ox's owner must be acquitted of guilt. But if the ox had a habit of goring in the past, and its owner was warned but did not keep it in, and the ox has killed a man or a woman, that ox must be stoned, and its owner also must be put to death. If a payment is required for his life, he must pay whatever he is required to pay" (Exodus 21:28–30). [North, *Exodus*, ch. 40]

Ownership establishes a judicial link between knowledge and responsibility. The biblically required system of private ownership is God's means of establishing legal responsibility and therefore justice. This is why the correct starting point of a philosophical defense of the free market's system of private property is found in Genesis 1–3. This is the *trusteeship aspect* of ownership. God held Adam responsible for violating the tree. This was a matter of self-government. But Adam was also required to defend it from Eve. He should have prevented her from eating from the tree.

There was also a *stewardship aspect* of the initial distribution. God held Adam responsible for the economic improvement of His property. "The Lord God took the man and put him into the garden of Eden to work it and to maintain it" (Genesis 2:15). There was no escape from this responsibility. It was based on Adam's ownership. This was not changed by the fall.

4. Capital

The earth was perfect, but it was undeveloped. This was also true of Adam. It would take time and labor for Adam to develop both the land and his wisdom. *Time was required for capital development.* This was not changed by the fall.

Adam had enormous wealth: the whole earth, minus one tree. "The Lord God commanded the man, saying, 'From every tree in the garden you may freely eat'" (Genesis 2:16). God placed no legal barriers around assets outside the garden. The trees inside the garden were consumption goods. Nevertheless, Adam was also told to work the land. This meant that he had to improve it. He had to apply labor to it. He also had to apply knowledge in order to apply physical labor in the right proportions. There also had to be a sequence of improvement: first, second, third. God established this model in the creation week. This was a rejection of magic: stones into instant bread (Matthew 4:3). [North, *Matthew*, ch. 1] *Time is an inescapable component of capital development.*

Adam had natural resources: land. He also had the ability to labor. Raw materials are worth nothing in the market unless they can be put to productive use, as determined by the future imputations of paying customers. It takes knowledge to put raw materials to productive use. *Accurate knowledge of markets is more profitable than accurate technical knowledge of the resources.* This form of knowledge is far more scarce than most assets are and most engineering knowledge is. You may own land with gold in it, but until you discover the gold, the market value of the land will not reflect this. *Knowledge about gold mining is worth much less than knowledge of where the gold is.* This economic analysis is the basis of Jesus' parable of the field. "The kingdom of heaven is like a treasure hidden in a field. A man found it and hid it. In his joy he goes, sells everything he possesses, and buys that field" (Matthew 13:44). [North, *Matthew*, ch. 31]

Land is a resource. Labor is a resource. Together, they produce capital: tools of production. *Capital is best defined as the product of land plus labor over time.* Land means natural resources. Labor means physical labor and mental labor. Time means temporal sequence: first, second, third.

5. Specialization

Adam had land in abundance, but he had very little labor time: no more than 24 hours a day. To complete his dominion assignment, he needed someone to help him with his labor. "The man gave names to all the livestock, to all the birds of the sky, and to every beast of the field. But for the man himself there was found no helper suitable for him" (Genesis 2:20). God gave him a helper. But Adam had to pay for her: a rib (v. 21). He did not know this in advance. It was not his choice. He did not negotiate with God regarding this price. (Men have humorous stories about how Adam bargained with God for the woman he received. I suspect that women have different stories. I have not heard any, however.)

The division of labor was implied by the terms of the covenant: "God blessed them and said to them, 'Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth'" (Genesis 1:28). Mankind had to multiply in order to complete this task. The following assessment is not the result of the fall. "Two people work better than one; together they can earn a good pay for their labor. For if one falls, the other can lift up his friend. However, sorrow follows the one who is alone when he

falls if there is no one to lift him up" (Ecclesiastes 4:9–10). [North, *Ecclesiastes*, ch. 14]

The division of labor between husbands and wives is the correct starting point for any biblical discussion of labor specialization. Adam Smith's famous example of the pin-makers has been quoted ever since 1776, but from an analytical standpoint, the story of Adam and Eve is better. The separate tasks appropriate to each were biologically determined. These were fundamental. The social forms of labor reflect this today. As greater capital has come into existence, this biological specialization has become less distinctive. For millennia, men chopped wood to light and heat their homes. Women usually did not. But with respect to electric lighting, heating, and cooling, gender conveys no advantage.

Specialization of production is based on many factors, but these were primary before the fall: gender and knowledge. Had there been no fall, with the multiplication of mankind, geography would have played an increasingly important role, but not indefinitely. With modern telecommunications, differences in knowledge have become the primary sources of specialization. There are two reasons for this. First, the economic value of highly specialized forms of market knowledge is far greater than any other resource. Second, the cost of telecommunications has fallen. This economic law is true: "When the price falls, more is demanded." More people with valuable specialized knowledge can find buyers of either this knowledge or the output of this knowledge. This shift in favor of the value of specialized knowledge over the value of geographically distributed raw materials has profoundly changed the world economy. It will continue to do so as capital development continues. Consider this example. The speed of communications in 1800 was a little over one mile per hour, which was what it had been in Jesus' world except for limited military communications with horses. This speed increased with the development of trains after 1830. Then came the first commercial telegraph in 1844, which increased the speed of transmission to 186,000 miles a second, minus the telegraphers' delays. Where a person lived along this the line of transmission made a big difference in the value of his land. Note: men had no biological advantage in telegraphy. They surely have no advantage today in telecommunications.

For the fulfilment of the dominion covenant, pre-fall mankind had to find ways to help each other. This required the specialization that furthered the division of labor. The fall did not change this.

6. Opportunities

Economic opportunities are *opportunities for service*: to God mainly, but by way of service to others—people we trade with, people who employ us, and people under our administration.

Unique opportunities for profit are perceived by people who have unique information and also the capital and courage to turn this information into profits. These people are called entrepreneurs. We are all entrepreneurs. We all make forecasts. We all make plans and take steps to make ourselves better off when the future arrives. But there are specialists in forecasting. *From the perspective of making money, the most valuable information that someone can possess is accurate information about future prices.* All market-based opportunities contain information about prices.

There were no prices in the garden. There was no market within the family. This made the family a non-market institution. Adam and Eve did not make money bids as a way to allocate their personal responsibilities. But, over time, the population would have grown. Information would have become far more specialized and far less based on face-to-face communications and negotiating. This is why market-based money prices would have arisen. Men are not omniscient. The discovery and development of exchange of ownership outside of the family would have arisen. It does not arise in a family. Why not? Because husbands and wives cannot legally sell their sexual services to outsiders. Families are not market-based institutions. Market exchanges between nuclear families would have arisen because of the economic benefits of specialization.

People take advantage of economic opportunities by exchanging ownership. They assess the value of these future opportunities differently. One man's opportunity to own is another man's opportunity to sell. Each is a buyer of opportunities, and each is a seller. Traditionally, we call a seller of money the buyer. We call a buyer of money the seller. But exchange is always two way. It is an exchange of legal ownership. This is how we exploit opportunities, which is another way of saying "take advantage of better ways to serve." *We purchase the legal right to serve.* We may serve ourselves. We may serve others. We may serve God. We may serve mammon. But we must serve. *Service is inherent in the dominion covenant.* Therefore, opportunities to serve are inherent in the dominion covenant.

Seeking profitable opportunities for service is how we seek to increase our wealth. This is the basis of market exchange. As Smith wrote: "Who-

ever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their selflove, and never talk to them of our own necessities but of their advantages." Put differently: "Do I have a deal for you!"

7. Cooperation and Competition

Adam needed a wife. Without a wife, he would have been less efficient in completing his tasks. He had too much work to do. He had to administer a large garden. A huge world lay outside the garden. Alone, he could not increase the value of natural resources as efficiently as if he had a wife and children. The value of additional labor was high in comparison to the value of additional natural resources. There was not much labor available and way too many natural resources for Adam to develop. He needed cooperation.

This did not mean that there would be no competition in his life. People want to prove to themselves and others that they do something well. Adam was no different. In the creation week, God daily evaluated His work and declared it to be good. This is the pattern for mankind. Alone, Adam had no one other than God to declare this to. No other human being would appreciate his work. Then God made Eve. But there was always this possibility: Eve might do some tasks even better than he did. If she did, then who should perform them? There would have to be evaluations. Someone would be declared the winner in a competitive environment.

As mankind multiplied, this kind of competition would have become common. People would assess who did what tasks best. Also, who charged the lowest price? *The more complex a society, the more competition there has to be.* Knowledge is limited and specialized. Skills are specialized. Had there been no sin, the market process would still have provided information on who did what best. Specialization is not the result of sin. Neither are multiplying opportunities.

So, in order to cooperate, Adam and Eve would have competed until it was clear to both of them which of them performed which tasks most efficiently. People think of cooperation as a benefit. The word "cooperation" has

a positive connotation. In contrast, some critics of the market process think of competition as a defect. *But to cooperate, we must also compete*. In a developed market order, sellers compete against sellers. Buyers compete against buyers. This would have been true in the world before the fall, had the fall not taken place before Adam and Eve had children. *In a world marked by the division of labor and specialization of both production and consumption, there cannot be cooperation without competition*. If producers did not compete against each other, consumers would not maximize their wealth. We all seek for bargains. Competing producers are the people who make bargains available. This arrangement was not the result of man's fall.

8. Pricing

Pricing is an aspect of finitude. It existed before the fall. There was a price that Adam paid for Eve: a rib. He did not get something for nothing. This should warn us that the formation of prices is not the product of sin.

To take advantage of any opportunity, a buyer asks: "What is the price?" Without knowledge of prices, people could not make wise exchanges. To get a wife and lose a rib was a benefit for Adam. Adam did not make this choice. God did. But the fact that he lost something in order to get what he needed was evidence of the nature of reality in a finite world. There are no free wives. There are no free lunches. To obtain ownership, temporary or permanent, we must surrender something of value to the person who owns what we want.

Adam wanted to be able to make choices on his own. Making choices is the essence of freedom. It is also the essence of adulthood. God had him name the animals that God brought to him. Are we to imagine that Adam wanted to be treated as an inexperienced amateur in every area of his life for the rest of his life? There would be no dominion. There would be only servitude. Mature men do not like servitude. The more creative they are, they more they want greater independence. They want to demonstrate their expertise. The model for this is the creation week. The Second Person of the Trinity was the Creator. He was under the Father's authority, but He was not a slave. He made His own decisions.

Prior to the fall, prices would have provided mankind with valuable information on how they could achieve their individual tasks. "Should I do this or that? Should I buy this or that . . . or nothing at all?" To determine the correct answer, they first needed to get this question answered: "At what

price?" For economists, this is the supreme analytical question. The fall has not changed this.

9. Profitability

Adam was not omniscient, as his decision to eat the forbidden fruit proves. He did not know the future perfectly. He had to decide which forecaster was reliable: God or the serpent. God promised a loss if he disobeyed: death. The serpent promised him a benefit if he disobeyed: to be as God. He preferred the benefit, discounting the probability of a loss.

To improve the world, Adam had to do something. He could not remain a pure consumer. He was human, and the dominion covenant defines humanity. There are blessings of consumption. "God said, 'See, I have given you every plant yielding seed which is upon the surface of all the earth, and every tree with fruit which has seed in it. They will be food to you'" (Genesis 1:29). But there are also responsibilities of administration. "God blessed them and said to them, 'Be fruitful, and multiply. Fill the earth, and subdue it. Have dominion over the fish of the sea, over the birds of the sky, and over every living thing that moves upon the earth'" (v. 28). Dominion is not automatic. It requires active administration.

Adam had to invest. How? By saving. He had to do without: forfeited time, forfeited leisure, and forfeited assets. *Adam's goal in life was not pure consumption*. He could have settled for that, but he would have had to forfeit the positive feeling that success in an uncertain venture brings. God pronounced His work good, day by day, in week one. His assessment was positive. To make it, His work had to match His plan. His plan had to match His priorities. To achieve such consistency was good. Adam had the correct model of his life of production. He had God's verbal revelation to him regarding the creation week. I assume that this revelation was verbal. He had not been there to see it and hear it.

10. Inheritance

God announced their responsibility to multiply. This means that they would have had to transfer the ownership of parcels of the world to their descendants. Their descendants also had to fulfill the dominion covenant. They had to use plans, raw materials, capital, and labor. They also had to invest time. They had to decide: time used to produce vs. time used to consume. They could not do both.

This meant that there had to be individual sequences over time. There had to be multiplication. *To avoid decreasing per capita wealth, humanity would have had to increase per capita productivity.* This requires saving (not spending on consumption) and investment (spending on production). Parents would have had to train their children. This is always a capital investment. It requires saving. The fall has not changed this. The fall has brought frustration and disappointment to this process of transferring ownership, but the requirement has not changed.

Dominion before the fall required population growth. So, in terms of extending the dominion covenant, there had to be a positive rate of return from having children. Each generation had to add more children. This meant that each generation had to teach the next generation to add productivity. Productivity involved a net increase after deducting the costs of capital consumption, time, and raw materials. There would have to be innovation. But each generation would have had innovators. *Human creativity is a more valuable resource than raw materials or capital.* Human creativity adds value. A growing population required increasing per capita productivity. But, because of differences in individual creativity and geography, rates of return on invested capital and time would have been higher before the fall: no losses.

Conclusion

Christian economic theory must begin with creation and its related issues: purpose, ownership, and providence. Next, it must move to Adam in the garden, not with Robinson Crusoe on an island. The categories of scarcity and resource allocation are important, but they are subordinate to the covenantal issue of ownership: God's original ownership and man's delegated ownership. Christian economic theory must extend its analysis beyond family ownership to the wider range of ownership and responsibility as these inescapably related concepts apply in the market-organized social division of labor.

The concept of ownership in a market society is inescapably related to the concept of disownership. The legal right to sell property and thereby *transfer legal responsibility* is the crucial legal aspect of the market process. Without the right to sell property, the market's self-contained and self-enforced (endogenous) sanctions of profit and loss would not govern the market process. Economic theory would lose its status as a science. It would become no more rigorous than sociology—a cruel fate in the eyes of economists.

The right to disown property and therefore the right to transfer legal responsibility does not apply well inside the legal boundaries of the covenantal institutions of the family, the church, and the state. This is why the categories of market analysis do not apply well to families, churches, and civil governments. I have covered this issue in detail in *The Covenantal Structure of Christian Economics*.

God's initial distribution of wealth is the starting point, both conceptually and historically, of the theory of market exchange. The dominion covenant still applies in the post-fall world. There is covenantal continuity: pre-fall and post-fall. This means that there is both ethical continuity and legal continuity. The heart of this continuity is God's prohibition of theft (Exodus 20:15). The decalogue is both moral and legal. Because of the covenantal and historical continuity regarding the initial distribution and distribution today, I must discuss the issue of the legality and morality of distribution and redistribution today. I do this in the next chapter.

13

REDISTRIBUTION

Then Job rose, tore his robe, shaved his head, lay face down on the ground, and worshiped God. He said, "I was naked when I came out of my mother's womb, and I will be naked when I will return there. It is the Lord who gave, and it is the Lord who has taken away. May the name of the Lord be blessed." In all this matter, Job did not sin, nor did he accuse God of wrongdoing (Job 1:20–22).

Analysis

I regard the Book of Job as the most enigmatic book in the Bible. In my 31 volumes of economic commentaries on the Bible, Job is the shortest: only six chapters. It is the shortest strictly academic book I have written: under 60 pages. [North, *Job*]

It begins with a strange encounter between God and Satan. The first two chapters tell the story. God verbally provoked Satan. There is no other text in the Bible that presents God and Satan face to face. Here is God's provocation.

> Then it was the day when the sons of God came to present themselves before the Lord. Satan also came with them. The Lord said to Satan, "From where have you come?" Then Satan answered the Lord and said, "From wandering on the earth, from going back and forth on it." The Lord said to Satan, "Have you considered my servant Job? For there is no one like him on the earth, a blameless and upright man, one who fears God and turns from evil." Then Satan answered the Lord and said, "Does Job fear God without reason? Have you not put a barrier around him, around his house, and around all that is his from every side? You have blessed the deeds of his hands, and his cattle have burst forth in the land. But now stretch out your hand and touch all that he has, and see if he does not curse you to your face." The Lord said to Satan, "Behold,

> all that he has is in your hand. Only against him himself do not stretch out your hand." Then Satan went away from the presence of the Lord (Job 1:6–12).

God knew exactly where Satan had been. Satan knew that God knew. This was not supernatural small talk. This was an encounter set up by God for His purposes. God was in charge. Satan did not approach God. God approached Satan. The book of Job conveys a theological message: God's purposes are His own. He answers to nobody. Satan answered to God. God did not answer to Satan.

To understand this book, we must understand Satan's motivation in life and his method. His motivation is to cut God down. He is unable to do this. He lacks power. He has a strategy: to thwart God's dominion covenant with mankind. He understands that the conflict between him and God cannot be settled by power. He would lose. But God has enabled him to strike at Him covenantally through mankind. Satan has more power than man does in history. The Book of Job is the clearest presentation in the Bible on the nature of this confrontation.

God has a covenant with mankind. In the garden, the serpent, as Satan's covenantal agent, confronted Eve, Adam's agent. He deceived her. He told her that she could eat from the forbidden tree and gain a benefit: knowing good from evil. She would not suffer the promised negative sanction: death. Eve tested the serpent's word by eating. Then Adam did. God brought negative sanctions. He definitively killed them on that day. The curse of death was on them and us. "By the sweat of your face you will eat bread, until you return to the ground, for out of it you were taken. For dust you are, and to dust you will return" (Genesis 3:19). He cast them out of the garden with only the clothes on their backs, which were provided by God by His grace. "The Lord God made for Adam and for his wife garments of skins and clothed them" (v. 21). Their curse of death developed progressively until they died. Then to dust they returned.

What did Satan get out of this? First, he got satisfaction. He had brought God down a notch, or so it seemed. He seemingly had disrupted God's plan for the ages by turning God's designated trustees against Him. Second, he got power in history. He became the prince of the power of the air (Ephesians 2:2). He bought time for himself. *This was a vast distribution of wealth and power: from mankind to Satan and his angelic host.* He could not ac-

complish this by a direct assault of God. He could accomplish it only because God's trustees are ethically vulnerable. He lured Adam into a disastrous act of theft. *Theft is the archetypal sin for mankind.*

The Book of Job makes sense only in terms of this ethical confrontation. Job was fulfilling the terms of the dominion covenant. He was, in this sense, a new Adam. "There was a man in the land of Uz whose name was Job; and Job was blameless and upright, one who feared God and turned from evil" (Job 1:1). He was also exceedingly rich by the standards of the day. "He possessed seven thousand sheep, three thousand camels, five hundred pairs of oxen, and five hundred donkeys and a great many servants. He was the man who was the greatest of all the people of the East" (v. 3). He was not vulnerable to Satan's direct temptations. "On each son's assigned day, he would give a feast in his house. They would send and call for their three sisters to eat and drink with them. When the days of the feast were over, Job would send for them and he would consecrate them. He would rise early in the morning and offer burnt offerings for each of his children, for he would say, 'It may be that my children have sinned and cursed God in their hearts.' Job always did this" (vv. 4–5). He offered sacrifices for his family. In this sense, he was an archetype of Jesus Christ, who offered the supreme sacrifice for His family: covenantally adopted mankind. Christ is the Creator and the Redeemer. Job was economically creative, and he was his family's redeemer. Satan could not touch him, literally and ethically. He dearly wanted to do both. He wanted a replay of Adam's fall. God deliberately gave him this opportunity.

God bragged about Job's righteousness. Satan responded by asserting that Job's righteousness had nothing to do with ethical commitment. God had purchased Job's obedience. God had made him rich. Take away Job's riches, Satan said, and he would curse God. He was arguing that Job's motivation was not righteousness; it was greed. His motive was impure.

Did Satan really believe this? Perhaps he did. Perhaps he was interpreting Job's behavior in terms of his own motives. But I doubt it. Satan knew Job was not vulnerable to his wiles. He could not get to God through Job in the way that he had gotten to Adam, by turning Adam against God by persuading him to become a thief. He could not tempt Job by offering him wealth or inside information about God's motives, which was inaccurate information, as Adam soon learned. He could tempt Job only by bringing him under negative historical sanctions. God let him conduct this test. Yet it is clear from the text that God had initiated this test. He had His own purposes. He did

not explain these purposes to Satan. By not revealing the facts of this confrontation to Job, God never explained His purposes to Job. He did reveal this much to Job: He is absolutely sovereign, and therefore Job had no moral right to complain about what had happened to him. He revealed this in chapters 38–41. The one wise counselor who came to Job, Elihu, the fourth one, had told Job the same thing (Job 32–37). [North, *Job*, ch. 5] This is why God did not judge him at the end. He did judge the first three (Job 42:7–9).

The story of the Book of Job is based on the covenantal structure of history. Righteousness brings positive sanctions; rebellion brings negative sanctions. This is stated most clearly in Leviticus 26 and Deuteronomy 28. Without this understanding, and without this presupposition, there cannot be Christian social theory of any kind. *This system of sanctions is the covenantal foundation of all Christian social theory.* If this system is not still in force, then there is no predictable relationship between righteousness and blessings, nor is there a predictable relationship between rebellion and cursing. If this is the case, then Satan has a fighting chance in history. If this is the case, then Satan can reward covenant-breakers, and they can gain control over the affairs of men. Satan dearly wants this to be the case. He is willing to intervene on the side of covenant-breakers by rewarding them handsomely, not because of his love for them, but because this seems to thwart God's dominion covenant in history.

Satan's plan for Job is clear to readers: he would bring negative sanctions against the most righteous covenant-keeper on earth. This would baffle Job. Why had these sanctions come on him and his family if covenantal causation in history is what God says it is: ethics-based? This confusion would break his commitment to God. God understood the logic of Satan's position, and he authorized Satan to bring negative sanctions against his wealth, including the murder of all of his children.

Job still did not rebel. He uttered his famous words: "It is the Lord who gave, and it is the Lord who has taken away. May the name of the Lord be blessed." So, Satan escalated the conflict. He told God that if God allowed him to take away Job's health, then Job would curse him. God authorized this in Job 2. But his plan did not work with Job. It did work with his wife. "Then his wife said to him, 'Do you still hold fast to your integrity? Curse God and die.' But he said to her, 'You talk as a foolish woman talks. Should we receive the good from God and not receive the bad?' In all this matter, Job did not sin with his lips" (Job 2:9–10).

Job did eventually sin. He demanded an explanation from God. Why had he come under these negative sanctions? He had been faithful to God's word and God's requirement for sacrifices. The three counselors presented the same argument to him. Job constantly said that he had not sinned, and the counselors insisted that he must have sinned; otherwise, the curses would not have come on him. Only Elihu understood the truth of the matter. He warned Job not to ask God to explain Himself. He did not accuse Job of having sinned before the curses. He was warning Job not to sin by demanding an explanation.

The Book of Job rests on this presupposition: there is a predictable relationship between covenant-keeping and blessings. There is also a predictable relationship between covenant-breaking and curses. These sanctions are predictable in history. They do not apply solely to the afterlife. If this is not the presupposition of the book, then the book makes no sense. Job's rebellion makes no sense. Satan's temptation makes no sense. God's provocation of Satan makes no sense.

The Book of Job is about the redistribution of wealth by violence. Satan intervened in order to strip Job of his wealth and his health. There was no other way for him to persuade Job to rebel. He blamed God for having placed boundaries around Job's wealth. That is, he blamed God for establishing Job's property rights in his wealth. Satan railed against the legitimacy of these property rights. Job did not deserve such protection. Job was simply milking the system. Job was a hypocrite. Job was a rebel at heart. Take away his wealth, and he would openly defy God. Satan was ultimately saying that God's protection of Job's property was based on this fact: *God is a fool*. God can be easily conned by a con man. Job was the ultimate con man: an ethical con man. He pretended to adhere to the ethical terms of the covenant, but it was all a sham. Satan would prove to God that it was a sham. Satan would thereby prove to God that the covenantal predictability between righteousness and blessings is at bottom nothing but a subsidy to hypocrisy.

Once again, Satan proved himself to be a rebel. Once again, he struck out at God's system of property rights through a covenant-keeper. This is Satan's way to undermine God's plan for history. He strips away visible blessings from a righteous man. This strategy was partially successful with Job, who did not curse God, but who demanded an accounting from God. Above all, this strategy was unsuccessful with Christ. Satan told Christ that if he would worship him, Satan would give Christ the whole world (Mat-

thew 4:9). [North, *Matthew*, ch. 3] This was a lie. Satan did not own the whole world. He was not the Creator. Christ was. Christ was God come back into history in bodily form, just as He had revealed Himself to Adam, in order to reestablish the property rights of covenant-keepers to the whole world, which Adam had possessed. Christ would redeem them spiritually, and through them, redeem the world. To redeem is to buy back. Covenant-keepers would henceforth buy back the world as Christ's trustees. They would not use violence or fraud. They would adhere to the law of the covenant. Christ *definitively* restored the dominion covenant as it had existed in the garden. His people are *progressively* to extend their dominion.

A. An Inescapable Concept

It is never a question of redistribution or no redistribution. It is always a question of redistribution according to which system of civil law.

God provided an initial distribution of wealth to Adam. Then he gave Eve to Adam. The two were not to stay in the garden forever. They were to leave the garden and extend their dominion across the face of the earth. Their net worth could appreciate only through the division of labor. They would be given children. Each of their children would inherit an appropriate portion of Adam's possessions. As they spread across the face of the earth, they would exchange goods and services with each other. They would earn income at varying rates according to services of varying prices and quality. The system of production would be governed by the supreme legal foundation of economics: the protection of property rights. There would be no threat of theft, except the forbidden tree, which would remain in the garden. Only by eating at the tree of life could individuals definitively escape the threat of negative sanctions through rebellion.

Theft is Satan's supreme temptation to man. His goal is to reverse the dominion covenant in history. Again and again, Satan and his covenantal disciples challenged the legitimacy of the existing distribution of wealth. They challenge the legitimacy of Job's declaration: "The Lord gives, and the Lord takes away. Blessed is the name of the Lord." *The Lord is not capricious in His continuing redistribution of wealth in history.* This is the economic lesson of the Book of Job. There is covenantal predictability between covenant-keeping and economic success, and also between covenant-breaking and economic failure. It may take time for this to play out visibly, but this is the heart of the dominion process.

Satan wants to break this predictability. This predictability is a threat to his kingdom. All of his economic schemes are based on either violence or fraud. Criminal theft is one way. War is another. Political revolution is another. Sometimes he uses democratic political forces that demand that the government use the threat of violence to redistribute wealth on a basis different from the laws of covenant-keeping: defense of private property and contracts. The supreme law of covenant-keeping in economic matters is this: *you must not steal* (Exodus 20:15). [North, *Exodus*, ch. 28] This remains the law today. Property rights, meaning rights defending ownership, are at the heart of the dominion covenant. They are at the heart of Christian civilization. *Satan therefore raises up critics who complain that the market process produces illegitimate results.* The free market process makes some people rich, and it makes other people poor. This, they say, is a violation of ethics. It must be stopped through political reform. It must be stopped through government regulation. Most of all, it must be stopped by tax policies that take wealth from the rich and give it to the poor (minus 50% for government handling). These tax policies violate the fundamental principle of biblical civil law: *equality before the law.* "Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously" (Leviticus 19:15). [North, *Leviticus*, ch. 14] This principle of civil law appears in the middle of a recapitulation of the Ten Commandments. "Do not steal. Do not lie. Do not deceive each other" (v. 13).

Economic theorists line up on one side or the other in the debate between those who would let free market forces distribute wealth vs. those who want intervention by the civil government to veto the constant distribution of wealth produced by the competitive auction process of the free market. Humanistic free market economists do not cite the Bible. They do not invoke ethics. They invoke economic efficiency and economic growth. They claim, correctly, that a rigorous defense of property rights is the most important single factor in promoting economic growth. Keynesian critics challenge this, calling attention to the redistribution of wealth that takes place during a recession. Socialists deny that either the free market economists or the Keynesians have a legitimate case. They invoke morality. They claim that the existing redistribution of wealth is morally illegitimate. They do not explain their morality. They do not tell us what the source of this morality is. But they invoke it.

The twentieth century was a kind of experimental laboratory in which the claims of the three camps were tested. The socialists and Marxist Communists lost the debate. Their economies created so much havoc and poverty that the world abandoned the socialists' key idea, namely, the ownership of the means of production by the state. But Keynesians and welfare state economists continue to gain the greatest support politically around the world. The voters remain committed to Satan's accusation against the legitimacy of the market's distribution of wealth, which is the inevitable result of a systematic defense of private ownership by the society and by the state. Am I saying that the welfare state is Satanic in origin? Yes, I am. Am I saying that the welfare state is an ethical rebellion against God and His moral law? Yes, I am. I am encouraging you to do the same. This is not acceptable rhetoric in higher educational circles. It violates standards of academic propriety. I do it anyway. Satan and his disciples should not get a free ride from Christians. This is a war to the death covenantally. It is a war for civilization. The stakes are high.

We read in Proverbs: "A good person leaves an inheritance for his grandchildren, but a sinner's wealth is stored up for the righteous person" (13:22). [North, *Proverbs*, ch. 41] Because I believe in the long-term accuracy of the forecast of economic success by covenant-keepers and economic failure by covenant-breakers, I also invoke economic theory in defense of the Bible's private property order. This legal system creates the long-term economic distribution that Proverbs forecasts. There can be a delay. Psalm 73 reminds us of this delay. "But as for me, my feet almost slipped; my feet almost slipped out from under me because I was envious of the arrogant when I saw the prosperity of the wicked. For they have no pain until their death, but they are strong and well fed. They are free from the burdens of other men; they are not afflicted like other men. Pride adorns them like a necklace around their neck; violence clothes them like a robe. Out of such blindness comes sin; evil thoughts pass through their hearts" (vv. 2–7). [North, *Psalms*, ch. 17] It also reminds us of the outcome. "Then I went into God's sanctuary and came to understand their fate. Surely you put them in slippery places; you bring them down to ruin. How they become a wilderness in a moment! They come to an end and are finished in awful terrors. They are like a dream after one wakes up; Lord, when you arise, you will think nothing of those dreams" (vv. 17–20).

Almost from the beginning of the Soviet Union in October 1917 until its economic collapse over seven decades later, intellectuals and most econ-

omists in the West told us that the Soviet economy was growing. These assessments were based on statistics published by the USSR. They were fake. Furthermore, a high percentage of the increased output was redistributed by the central government into military equipment and central planning projects related to military production. Little of this wealth passed to Soviet citizens. A few Western economists warned their colleagues about this, but to no avail. I cited some of them in Appendix B, "Soviet Economic Planning," in my book, *Marx's Religion of Revolution* (1968). Two decades later, the author of the most successful college textbook in economics, Paul Samuelson, a professor of economics at the Massachusetts Institute of Technology, in the 1989 edition of his textbook wrote this: "The Soviet economy is proof that, contrary to what many skeptics had earlier believed, a socialist command economy can function and even thrive" (13th edition, p. 837). In 1989, the Soviet economy was in the final stages of collapse. In December 1991, the Soviet government disbanded. The Russian Federation replaced it. Something much more like a free market economy was established, and then, for the first time in almost eight decades, rapid per capita economic growth began. Communist China had experienced the same thing throughout the 1980s.

I do not believe that economic theory is value-free. It is value-laden. Christian economic theory must begin with the doctrine of the dominion covenant. Christian economists must confront the welfare state in the name of God, not simply in the name of economic efficiency. This is what I am doing here.

B. A Conflict Over Inheritance

Mankind is the God-delegated owner of the earth. This ownership is derivative. Prior to the fall, there was only one family of God. After the fall, there are two: adopted sons and disinherited sons. *The conflicts of history are aspects of a struggle for this inheritance: point five.*

Marx's famous phrase in *The Communist Manifesto* (1848) is this: "The history of all hitherto existing society is the history of class struggles." These words began Section I: "Bourgeois and Proletarians." Yet he never defined class. In Chapter 52 of his posthumously published third volume of *Capital*, "Classes," he wrote: "The first question to be answered is this: What constitutes a class? — and the reply to this follows naturally from the reply to another question, namely: What makes wage-labourers, capitalists and land-

lords constitute the three great social classes?" The immense manuscript ended after two brief paragraphs. He never defined the central concept of his lifetime's work. Marx had an exceedingly narrow concept of the nature of the covenantal struggle in history. His ideas had great influence in the twentieth century after Lenin's successful revolution in Russia 1917, but they rested on a conceptually flawed understanding of historical development.

Where does property (point three) come from? From God. "Every good gift and every perfect gift is from above. It comes down from the Father of lights. With him there is no changing or shadow because of turning" (James 1:17). [North, *Epistles*, ch. 34] James made this clear: *all positive sanctions are from God*. This includes the ownership of property. Benefits are a matter of grace. Grace means unearned benefits. God does not deal with men as economic trading partners. He does not surrender ownership of anything in order to get something of greater value to Him in return. *He gives men blessings in order to attain His purposes*. These are gifts, not something that men have earned. Men are always in debt to God. But God, in His grace, forgives the debts of covenant-keepers. This is why Jesus told His disciples to pray this: "Forgive us our debts, as we also have forgiven our debtors" (Matthew 6:12). [North, *Matthew*, ch. 12:B]

Aren't all hard-working people entitled to benefits? Haven't they earned these benefits? Jesus called all of us unprofitable (unworthy) servants. "But which of you, who has a servant plowing or keeping sheep, will say to him when he has come in from the field, 'Come immediately and sit down to eat'? Will he not say to him, 'Prepare something for me to eat, and put a belt around your clothes and serve me until I have finished eating and drinking. Then afterward you will eat and drink'? He does not thank the servant because he did the things that were commanded, does he? Even so you also, when you have done everything that you are commanded, should say, 'We are unworthy servants. We have only done what we ought to do'" (Luke 17:7–10). [North, *Luke*, ch. 41] Adam's sin put all mankind onto the negative side of God's ledger on judgment day. Only by God's special grace is anyone found on the positive side of God's ledger. Apart from special grace, all people are losers. Common grace allows covenant-breakers to produce benefits, but these benefits do not overcome the liabilities. *The benefits they produce are by means of God's grace*. So, we are back to James' declaration.

God owns the world because He created it. He delegates ownership of specific legal rights of control to specific individuals and specific institutions.

He holds them accountable for as long as they retain ownership. This is the biblical concept of ownership. Then what biblically legitimate complaints do non-owners have against an existing distribution of property? One complaint would be this: the present owner stole the property he now controls. Another would be this: he threatened violence against the original owner to gain ownership. If the owner refused to sell, the would-be owner threatened to harm him. Another would be the use of fraud in the sale. God has laws against such actions. But what if the present owners hold title without having violated any of God's laws? They purchased the property through voluntary transactions. Then the complainers have no biblically valid complaint. This is redistribution through voluntary exchange by means of God's legal order.

God's initial distribution to Adam was the whole world, minus the forbidden tree. After the fall, Adam's distribution was the whole world, minus the garden and the tree of life. "So God drove the man out of the garden, and he placed cherubim at the east of the garden of Eden, and a flaming sword that turned every way, in order to guard the way to the tree of life" (Genesis 3:24). [North, *Genesis*, ch. 13] *This was God's secondary distribution*. It was a matter of God's grace. Mankind is still under the terms of the dominion covenant. Mankind still is required to administer God's property in His name (trusteeship) and on His behalf (stewardship).

As men have spread across the earth, their competition against each other for control of scarce resources has produced bidding wars. Prices appeared because of scarcity: "at zero price, there is greater demand than supply." God prohibits violence as a means of increasing individual wealth. He also prohibits theft. Men are supposed to gain sufficient wealth to accumulate capital by means of service to others. One aspect of this capital-accumulation process is profit-seeking service to customers. Those servants whose services are purchased by customers make profits if they have provided these services at prices higher than their costs of production. But it was God who provided them with the strategies they used to make profits. These strategies were gifts from God. Owners hold title to these profits only at God's grace-based discretion.

C. Ownership and Ethics

Humanistic free market economists never start their analyses with the concept of ownership. I believe that the primary reason why they refuse to do this is that the issue of ownership raises two related issues that they do

not wish to consider, let alone discuss publicly: (1) the moral foundation of ownership; (2) the source of original ownership. They maintain that economic theory is value-free. They therefore face a conceptual problem: *the legal issue of ownership is inescapably moral.* Men ask this: "Who has the right, meaning the legal right to exclude, to control a particular piece of property? On what legal basis does he have this right?" All legal systems are grounded in some concept of morality. Humanistic economists do not wish to confront this issue. So, they begin with this presupposition, which may or may not be stated in their books: "*Given* the existing distribution of ownership. . . ." They pretend that if they ignore an externally given institutional moral fact from outside the market process, they will not have to discuss morality in their subsequent analyses. In other words, *if they exclude morality from the beginning, they can exclude morality all the way to the end.* So, they always ignore the issue of the moral foundation of ownership.

Second, they do not discuss the origin of ownership. They avoid this topic for the same reason. The original owner had a legal claim to the property. On what basis did he maintain this claim? Christian economics makes this clear: *God was the original Creator, and therefore He was the original Owner.* He set the terms of the leaseholds for His property. He also set the legal boundaries of His property. He also established the legal framework for adjudicating the issue of ownership. Humanistic economists do not want to raise the issue of God, so they ignore the issue of original ownership. Step by step, this trail leads back to someone who announced: "This property is mine!" They do not want to confront the issue of the public's response: "On what basis?"

Critics of capitalism exploit the economists' silence regarding the moral basis of private ownership. They claim that they come in the name of a higher morality. Humanistic economists insist that they do not come in the name of any morality at all. They have surrendered the moral high ground. The only moral ground visible to most voters is the low ground of political coercion and theft by the ballot box. This political morality is proclaimed by the enemies of the free market: "Thou shalt not steal, except by majority vote." Millions of voters have larceny in their hearts, so they line up behind competing groups of political thieves. They do so in the name of a morality that is designed to replace God's.

One economist in the free market camp established his reputation internationally by denying both the moral case and the economic case of

property owners in disputes over the use of their property: Ronald H. Coase. He wrote what became the most prominent academic journal article in the history of economics: "The Problem of Social Cost." It was published in 1960 in the University of Chicago's *Journal of Law and Economics*, which was a new journal at the time. Coase argued that it does not matter what the initial distribution of property is. Economic analysis can safely ignore this question. He argued that the government's judges should award property rights on the basis of social benefits to society. He used a famous argument from the early nineteenth century regarding sparks from coal-fired railroad engines that set fire to crops. The Mosaic law is clear on this issue: the person who sets the fire is legally responsible. He must pay the victim the value of the destroyed crops. "If a fire breaks out and spreads in thorns so that stacked grain, or standing grain, or a field is consumed, the one who started the fire must surely make restitution" (Exodus 22:6). This law had been the basis of British common law for centuries. Coase abandoned this principle of legal liability.

Coase argued that this view of ownership and liability is not economically relevant. Judges should decide whether the public gains greater economic value by forcing the railroad company to impose spark inhibitors or by allowing the crops to burn. He did not explain how judges could decide this by using economic logic. He did not mention the crucial (and unanswered) theoretical issue that confronts all humanistic free-market economic theory, namely, the impossibility of making scientific interpersonal comparisons of subjective utility. *There is no objective value scale for judges to use in handing down such a decision: railroad vs. farmers.* Furthermore, Coase's view of civil law would create political warfare between owners of property. Owners think they have a moral right to their property. Coase's approach to civil law would lead to resentment and violence. Yet Coase convinced the entire economics department of the University of Chicago of his position in one evening of discussion. The department then hired him. He won the Nobel prize in 1991, primarily based on this essay. This is the moral *no ground* of modern free-market economics.

I wrote a book against this theory of ownership in the year after he won the Nobel prize: *The Coase Theorem* (1992). A decade later, I wrote an article for *The Journal of Libertarian Studies* critiquing Coase's view: "Undermining Property Rights: Coase and Becker." Coase never replied in print. None of his followers ever replied in print.

D. Redistribution and Ethics

Humanistic economists insist that economic theory is value-free. They insist that they do not believe in economic theory as resting logically or methodologically on any moral system. They deny that the coherence that they affirm between the profits of individual entrepreneurs and national economic growth is in any way based on ethics. They usually defend honesty in business, especially adherence to contracts, as productive of cooperation. Honesty increases the division of labor, which in turn increases efficiency. Increased efficiency produces greater output per unit of resource input. This produces individual wealth. It also creates national wealth. So, they insist, they are favorable to morality as a pragmatic strategy of wealth creation. But they deny emphatically that economic science has any ethical component. It is not grounded in morality. Rather, it is grounded in efficiency. Economic theory reveals the ways to wealth: greater per capita capital investment, a greater division of labor, greater specialization of production. These are exclusively matters of technique, not morality. They are matters of entrepreneurial alertness in a market system governed by economic laws, such as the law of supply and demand. There is a metaphorical invisible hand, but there is no hand of God.

Economists are aware that effective advertising increases business profitability. They understand that advertising is a factor of production. It increases sales. They do not understand that this analysis also applies to ideas. *The efficient marketing of ideas involves carefully crafted appeals to people's self-interest*. This is why Jesus used pocketbook parables to convey theological truths and thereby produce righteous living. Most people believe that there is an overarching coherence between doing the right thing and prospering personally. They do not see this coherence as exclusively pragmatic. They see it as grounded in morality.

Free market economists come before the general public with a message. They come in the name of improving our world. They ask people to believe that economic freedom produces greater wealth for all. They ask them to believe that if politicians reduced the existing level of state coercion in the economy, most people would be better off economically. But they refuse to invoke God's morality and personal righteousness based on this morality. They deny that they come in the name of morality. Rather, they come in the name of efficiency. "Put your trust in the metaphor of the invisible hand."

They are openly challenged by politicians and moralists who come in the name of the poor, the afflicted, and the economically dispossessed. The critics blame immoral businessmen for exploiting the weak. They point enthusiastically to government-funded wealth redistribution programs and massive public works projects that are easily visible. They call on voters to elect politicians who will enact new programs of wealth redistribution from the rich to the poor. The argument seems logical. There really are rich people. Conclusion: they must have gained their wealth by exploiting the poor. So, it is time for voters to elect politicians who will bring judgment day. Really. This time the politicians really will pass such laws. They have promised to do this ever since the Great Depression in the 1930s. Somehow, there is still exploitation. Somehow, there is still poverty. But this time, things will be different. "Trust us."

Free market economists have charts that they somehow think will prove their case, but no one except other economists can understand these charts. Most of the other economists believe in state intervention into the operations of the economy. Next, free market economists offer equations. No one except other economists knows what they are talking about, and most other economists have rival equations. Free market economists insist that they come in the name of efficiency, not morality. Voters think of themselves as moral, but most of them suspect that they are not very efficient. So, they dismiss the arguments of free market economists. They cannot follow these arguments. They do remember this: "Economic theory is not grounded in morality or faith in God." Then they vote for politicians who promise to redistribute wealth and stamp out exploitation of the poor. Free market economists shake their heads in despair. "The voters just cannot follow simple arguments." On the contrary, voters can follow the economists' arguments quite well. The economists are denying fundamental premises of the voters' lives. First, the world is not ethically random. Second, there is an invisible God who is not a metaphor. Third, He rewards those who do the right thing. Free market economists cannot persuade them to substitute the economists' recommendation: "Do the thing right." The economists preach efficiency. The interventionists preach ethics. "Do the right thing." Free market economists lose the political debate. They do not understand why. They are blind to their own blindness.

E. Inequality

God grants life. He also grants salvation. "God chose to give us birth by the word of truth, so that we would be a kind of firstfruits of all the things that he created" (James 1:18). This is entirely at His discretion. Paul wrote: "For he says to Moses, 'I will have mercy on whom I will have mercy, and I will have compassion on whom I will have compassion.' So then, it is not because of him who wills, nor because of him who runs, but because of God, who shows mercy. For the scripture says to Pharaoh, 'For this very purpose I raised you up, so that I might demonstrate my power in you, and so that my name might be proclaimed in all the earth.' So then, God has mercy on whom he wishes, and whom he wishes, he makes stubborn" (Romans 9:15–18). This is true of the grant of eternal life. How much more is it true of ownership of goods, which are of far less value! How much less value? This much: "For what does it profit a person if he gains the whole world but forfeits his life? What can a person give in exchange for his life?" (Matthew 16:26). [North, *Matthew*, ch. 35]

1. Inequality Is Universal

There is eternal inequality between covenant-breakers and covenant-keepers. The blessings are enormous; the penalties are enormous. Compared to this inequality, all other forms of inequality border on the irrelevant. Nevertheless, they are not historically irrelevant. *History develops in terms of these inequalities*. But these inequalities are not the primary cause of history's development. God's decree is. Jesus said this of Judas: "But pay attention. The one who betrays me is with me at the table. For the Son of Man indeed goes as it has been determined. But woe to that man through whom he is betrayed!" (Luke 22:21–22). Judas was unequal to Peter, both as a disciple and as an historical figure. Judas was the consummate destroyer in history. Peter became a builder.

All of life is based on inequalities. There are genetic inequalities. There are inequalities in terms of geography. There are inequalities associated with specific skills. There are inequalities associated with when people are born. Some people have skills that are either economically irrelevant or marginal in a particular time frame. If they had been born a decade later, they would have been extremely successful. There are inequalities associated with the happiness of marriages. There are inequalities with respect to

the size of churches. Most of these inequalities are not causally associated with conditions that civil governments can or should interfere with. They are therefore not the focus of political mobilization.

This immunity from politics is not the case with economic inequality. There has always been criticism of the free market because a few people get rich, but most people do not. The percentage of people who get extremely rich is low. This has been true in every society in history. *Economic inequality is built into the creation.* There is only one owner at the top: God. In every field, there are only a few virtuosos. They may or may not make a lot of money, but they are clearly the best in the field. As long as no money is involved, there are few critics who complain about the unequal distribution of unique degrees of talent—artistic, athletic, or scholarly. But, as soon as business is involved, there are legions of critics who say that the free market system is unfair. They call for politicians to redistribute wealth on the basis of state power. They despise the existing distribution of wealth. They despise the idea that God has allocated wealth on the basis of grace. They reject the idea that competition in an open market should lead to a few people who get very rich and the masses who remain relatively poor. They despise capitalism, despite the fact that only capitalism has produced enormous economic benefits for all members of society.

2. Capitalism's Critics

Critics of capitalism are almost always critics of inequality. They are also critics of the idea that God has imposed inequality, especially in the area of wealth. They want the state to redistribute wealth by the threat of violence. They do not believe that God owns the world. They do not believe that God has used the competitive market process to allocate wealth in terms of consumers' expenditures of money. They do not believe that consumers, because they own the most marketable commodity, money, possess greater authority in the market process than producers do. They blame producers for economic inequality. They never blame consumers. They see themselves as consumers, and they think they have pure hearts. Therefore, if someone has gained enormous wealth in a competitive free market, the market process must be at fault. They do not blame rival consumers who are competing against them. They do not believe that prices are set on this basis: consumers compete against consumers; producers compete against producers. So, they call on the power of the state in the name of a higher

morality. But a morality that seeks to be higher than God's morality is not a reliable morality.

There is also the issue of civil justice. The Bible demands that civil courts judge in terms of the law, not in terms of a man's economic condition (Leviticus 19:15). This is the biblical principle of equality before the law. This is the equality that God demands. This raises an economic question. Some people have skills that the market rewards with money. If the civil law treats these people as it treats all people, they will be allowed to keep their wealth and accumulate more if they continue to satisfy consumers. This creates a dilemma for the defender of equality. He must choose between two concepts of equality: equality before the law or equality of economic condition. F. A. Hayek, a legal theorist and an economist, explained this dilemma in his book, *The Constitution of Liberty* (1960). "From the fact that people are very different it follows that, if we treat them equally, the result must be inequality in their actual position, and that the only way to place them in an equal position would be to treat them differently. Equality before the law and material equality are therefore not only different but are in conflict with each other; and we can achieve either the one or the other, but not both at the same time. The equality before the law which freedom requires leads to material inequality. Our argument will be that, though where the state must use coercion for other reasons, it should treat all people alike, the desire of making people more alike in their condition cannot be accepted in a free society as a justification for further and discriminatory coercion" (Chap. 6:2).

Equality before the law, meaning a legal order that does not discriminate in terms of a person's economic condition, rich or poor, is a fundamental principle of personal freedom. This is why the Bible, by demanding that the state enforce the principle of equality before the law, promotes the development of a free society. Conversely, this is why widespread hostility to biblical law in the area of biblical law's enforcement of private property rights undermines a free society.

3. Jealousy and Envy

Some of the critics are driven by jealousy. They believe that if they can coerce rich people to sell some of their wealth to other rich people, the state can legitimately tax them at high rates and transfer the tax money to the state. They believe in state power. They believe that the state can and should distribute most of the wealth in society. In contrast, there are some voters

who are not driven by jealousy. They are driven by envy. They don't really believe that they will personally benefit from a massive redistribution of wealth from rich people to the state. But they so deeply resent the fact that rich people are rich that they are willing to allow the state to confiscate large portions of rich people's wealth. They promote this even when they know that state confiscation will reduce the productivity of rich people, which will in turn reduce the economic growth of the economy. They are so deeply resentful against the wealthy that they are willing to sacrifice their own personal economic gains in order to see the rich suffer the loss of their wealth.

The jealous person thinks this. "He has something of value that I want. I can take some of it from him if I threaten violence against him. He can keep some of his wealth, but I will keep some of it. This is negotiable." The envious person thinks this: "I can never get my hands on his wealth. But I don't think anyone should have so much wealth. I am willing to destroy his wealth even at the cost of suffering some economic losses." It is possible to negotiate politically with a jealous person. It is not possible to negotiate politically with an envious person.

It is dangerous to indulge in the sin of envy. It is blinding. It is all-consuming. Nothing can placate it. The envious person resents the fact that the target of his envy is in a position to bargain with him. He does not want to make a deal. He wants to destroy his enemy. Of all people in history, Judas was the man most driven by envy. He wanted to tear Jesus down. The 30 pieces of silver were simply an excuse. He tried unsuccessfully to give back the money later on (Matthew 27:3). He wanted to tear Jesus down with such a degree of fanaticism that he chose eternal damnation. He thought it was worth the trade. Then he committed suicide. His envy destroyed him.

Humanistic economists do not try to persuade voters that the welfare state is immoral. They do not believe that economic analysis should rest on morality. Therefore, they make the case against the welfare state on the basis of the greater economic efficiency of the free market. But this does not persuade the most committed critics of the free market. The critics hate inequality to such a degree that they are willing to sacrifice economic efficiency, even when they are the beneficiaries of economic efficiency. In short, they are driven by envy. It is not possible to argue logically with people who are driven by envy. They must either be converted from envy on the basis of a higher morality, or else they must be outvoted. Economic logic does not persuade them. Certainly, a supposedly value-free economic logic does not

persuade them. They think of themselves as moral crusaders. They are in fact immoral crusaders.

F. Political Centralization

In May 1976, two of America's most prestigious and best-funded conservative educational foundations, the American Enterprise Institute and the Hoover Institution, held a conference on income redistribution. At that conference, some of America's senior economists gave lectures. Printed versions were published in 1977: *Income Redistribution*. As is the case with most collections of lectures by professors, it sank without a trace.

One of the contributors was a sociologist, Robert Nisbet. He was the best-known conservative sociologist in America. He had been my mentor a decade earlier. He was on my Ph.D. committee. The most important theme in his career was this: political centralization. He was a defender of localism, decentralization, and voluntary associations. He was a great fan of the original sociologist, Alexis de Tocqueville, a French visitor to United States in 1829 and 1830. He wrote the two-volume set, *Democracy in America*, which appeared in 1835 and 1840. The fundamental theme of that book was the spread of equality throughout the West, but especially in the United States. Nisbet began his article with a quotation from the end of the second volume. "The nations of our time cannot prevent the conditions of man from becoming equal, but it depends upon themselves whether the principle of equality is to lead them to servitude or freedom, to knowledge or barbarism, to philosophy or wretchedness."

Tocqueville had it wrong, both conceptually and historically. Equality was not increasing in his day. The rhetoric of equality was, but equality was not. Conceptually, hierarchy is built into the cosmos. The Second Person of the Trinity is subordinate to God the Father. But there is also equality, as seen in the doctrine of the ontological Trinity. We must affirm both positions. It is not a question of either/or. It is a question of both/and. The social and political balance is achieved by the grace of God through biblical law. Equality before the law produces the inequality of wealth. Any attempt by critics of any quality to use the state to redistribute wealth must invoke the principle of inequality before the law.

Critics of the free market system have been arguing for centuries that the free market creates economic inequality. They are correct; it does. They are opposed to this inequality. Nisbet's article is devoted to a careful con-

sideration of the ethics of this hostility to inequality and also the political implications. He thought this hostility is based on the sin of envy. He was familiar with the classic book on envy by Helmut Schoeck, *Envy*, which had been published in 1966 in German, and was published in 1969 in English.

Nisbet contrasted two kinds of equality: equality before the law and inequality of economic results from the law. The first is basic to the common law. The second is basic to all systems of socialism, at least as a theoretical ideal. I argue that the West has held to the concept of law which Moses announced to the people of Israel. "Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously" (Leviticus 19:15). In opposition to this is egalitarianism. Nisbet devoted three pages to this topic. He made this observation. ". . . equality has a natural affinity with the whole idea of centralized racialist government. Edmund Burke said, correctly: 'Believe me, sir, those who attempt to level never equalize.' But it is hard nevertheless to prove difference between leveling and equality when large masses of people are involved, and when central bureaucracy, working in the name of humanitarianism or social justice, is at the helm. Even if one were indifferent to equality as such, adoration of central planning, central management, of economy and society would, I think, necessarily bring one around to adoration of the quality" (pp. 184–85).

There is something else to consider. "Fifth, equality is the only possible value that can really serve revolutionary aspiration. All revolutions in history, the American Revolution possibly in part excepted, have been mounted on an assault against inequality. Freedom can serve as the point of departure for liberation movements—liberation from whatever kind of imagined or perceived tyranny. But freedom, in any genuine sense of the word, cannot be successful as the *continuing* theme of a revolution, for, once a revolution has been successful in military or political terms, the people are, by definition, made free. But not equal. Not immediately. Hence the need for a process of permanent revolution in society that can be best generated by the value of the quality and that can be justified by incessant references to the surviving consciousness of aristocrats, businessmen, Trotskyites, confusions, and so on" (p. 185).

Nisbet was opposed to both revolution and war. He was convinced that war and revolution centralize political power. He made a profound observa-

tion. "The reason centralization of power so easily results from revolution and war, so evidently links them, is its ineradicable relation to equality—or, at very least, to leveling. It is not possible to centralize power in a society without, in some degree, equalizing. Correspondingly, it is not possible to effect equality, in sudden and calculated fashion—or at least to effect a claimed equality of economic and social condition—without in large degree centralizing and bureaucracy ties and political authority" (pp. 191–92).

In every socialist society, we still find economic inequality. The system of economic sanctions that enables some people to get rich is different from the free market's principle of high bid wins. The hierarchy is based on political power. F. A. Hayek devoted Chapter 10 of his 1944 book, *The Road to Serfdom*, to this topic: "Why the Worst Get on Top." They get on top because they are ruthless. They use political power as a means of enhancing their own positions. The more ruthless they are, the more likely they are to get on top. In the twentieth century, we had the triumvirate: Stalin, Hitler, and Mao. But the master tyrant was Lenin. He provided the original model. He created the institutions of tyranny that led to the slaughter of perhaps 100 million people under Communism. The Soviet Union led to the rise of Hitler and World War II, in which another 80 million may have perished. Without Lenin, there would not have been Hitler, Stalin, or Mao.

It takes centralized and political power to extract sufficient wealth from the rich to distribute it to the poor. Once the instruments of terror are created, then a new hierarchy comes into power. This was the lesson of Russian Communism and Chinese Communism. The redistribution of wealth was achieved by the control of the instruments of terror, not the principle of high bid wins. This redistribution did not lead to equality. It just led to a different group at the top of the economic pyramid.

Every program of politically imposed equality is based on coercion by the state. This coercion is justified in the name of ethics. The ethical system begins with a denial of both the legitimacy and the efficacy of the biblical principle of equality before the law.

G. Hostility to Biblical Law

God is the source of the initial distribution of wealth. He established the legal and moral order that He wants every society to use in the defense of private property. These laws can be found in the Bible. When these laws governing private property are enforced by the civil government and by

custom, the result is the creation of the free market social order. *The free market social order is the inevitable product of biblical law and biblical morality.* Christian critics of the free market are always critics of biblical law. They are critics of economic inequality because they are critics of biblical law. They all rejected the judicial principle of Leviticus 19:15. They want the civil government to identify economic inequality as proof of immorality. They demand that the civil government decide cases on this basis: to seek greater economic equality by refusing to enforce equality before the law. *You cannot have equality before the law and economic equality.* This is because people are innately unequal. If the state treats them equally, the results will be unequal. This is true in every field. It is surely true in athletics. It is surely true in artistic performance. It is therefore also true in economic performance. But the critics of economic inequality deny this. They deny the legitimacy of the principle of equality before the law. They believe in the power of the state to achieve greater economic equality by the threat of violence against economically successful people. They so despise economically successful people that they are willing to surrender the biblical principle of liberty: equality before God's law.

Conclusion

History is the story of the redistribution of wealth, power, influence, and all of the other blessings of life. These blessings are constantly being redistributed from some people to others, and from some groups to others. The supreme question with respect to redistribution is this: *on what covenantal basis is this redistribution taking place*?

Throughout history, there have been political special-interest groups that come in the name of a higher morality and insist that the civil government must intervene into men's economic affairs in order to achieve a just distribution of wealth. This argument rests on a presupposition: *the existing distribution of wealth is illegitimate.* Different groups offer reasons for this supposedly illegitimate distribution. They offer different theories of the proper legislation for the state to restore legitimacy. In all cases, there is an underlying morality that governs the call for the state to redistribute wealth. This morality is not always admitted in public. The philosophical details of this morality are rarely developed by the critics. Nevertheless, millions of voters respond favorably to these claims, in much the same way that Adam responded favorably to a similar accusation against the existing distribu-

tion of knowledge. *The temptation to steal property that belongs to someone else is a permanent temptation in the hearts of men.* This is why the commandment against theft is the premier commandment in economic affairs. Christ's response to this temptation was definitive: "Again, the devil took him up to a very high hill and showed him all the kingdoms of the world along with all their splendor. He said to him, 'All these things I will give you, if you fall down and worship me.' Then Jesus said to him, 'Go away from here, Satan! For it is written, "You will worship the Lord your God, and you will serve only him"' (Matthew 4:8–11). [North, *Matthew*, ch. 3] Satan has no legitimate ownership claim to anything. Christ created the world. He is the cosmic Owner. Satan holds whatever he controls only on the basis of having deceived Eve and having lured Adam into an act of theft. They transferred allegiance to him by accepting his word rather than God's. Then they became thieves. Satan is the consummate thief. He is a squatter in history.

The Bible affirms the legitimacy of the state's redistribution of wealth only in this case: restitution to victims of theft, fraud, or negligence. If someone is the victim of theft, and the thief is captured, tried, and convicted, the state should demand the payment of restitution from the thief to the victim (Exodus 22:1, 4). [North, *Exodus*, ch. 44] A call for political reform that is based on the restoration of this principle of wealth redistribution by the state is legitimate. I am aware of no such political movement anywhere on earth.

Another legitimate reform would be to abolish existing programs that use the state to redistribute wealth. But this would mean eliminating most national legislative programs and all existing tax systems. The modern state is built on comprehensive wealth redistribution. It will take generations to return to anything resembling the biblical legal order governing property rights.

14

SCARCITY AND COSTS

To Adam he said, "Because you have listened to the voice of your wife, and have eaten from the tree, concerning which I commanded you, saying, 'You may not eat from it,' cursed is the ground because of you; through painful work you will eat from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field. By the sweat of your face you will eat bread, until you return to the ground, for out of it you were taken. For dust you are, and to dust you will return" (Genesis 3:17–19).

Analysis

The fall of man led to a curse on man and a curse on the ground. This cursed scarcity, but it was not the origin of scarcity. *The combination of the dominion covenant and man's finitude was the origin of scarcity.* Scarcity was built into the creation. In the garden, Adam faced finitude. He could not wave a magic wand to get what he wanted. He had to labor, just as God had labored for six days. He faced the constraint imposed by time. Time is linear. There is progression chronologically. To produce and to consume, men face a sequence. The threat of death reminds men that there is a permanent limit on what they can accomplish in history. It also reminds them that they must make their peace with God before time runs out. This testimony is inherent in humanity. Man is made in the image of God. This image testifies to Man regarding God, law, and final judgment. "For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of people, who through unrighteousness hold back the truth. This is because that which is known about God is visible to them. For God has enlightened them" (Romans 1:18–19).

God cursed the ground, meaning nature, along with mankind. This has made man's work more difficult. Put in terms of economic analysis, this has imposed costs on production and distribution that did not exist prior to the fall. Because of this curse, there are new costs, new restraints on men.

Cursed scarcity thwarts men. They seek to overcome its effects. They want greater wealth. In order to obtain this wealth, men must now cooperate with each other in the division of labor. They can then benefit from each other's productivity. They exchange goods and services. They become interdependent. The positive sanctions of economic exchange are lures to cooperation. In a world of sinners, these positive sanctions are blessings. They favor peace. *There is an element of grace in this curse.*

The division of labor is now imperative for successful, efficient, low-cost production. There are no free lunches in a cursed, scarce world. There are also no free murders. Every man's labor can be useful to others in the marketplace. Murder a man, and you remove a source of productivity from the marketplace. You remove someone who might have made your work easier or your wealth greater. Battling an uncooperative nature, men need the division of labor more now than they did prior to the rebellion. They need each other to enjoy the full potential of each person's productive capacities. Having to work is also a way of draining energy that might have been put to perverse ends. Men have less free time to scheme and pillage. They have less strength. *Part of the energy of nature was re-channeled by God into avenues that would thwart men's evil plans.* Time, capital, and energy spent towards increasing the productivity of the land could not be used simultaneously to commit any mayhem. The curse of the ground has helped to produce a zone of safety for men from their fellows. *Man was made to sweat in order that he might not have to bleed.*

The curse of the ground is also a blessing for the ground. Men in a scarce world must treat the creation with care if they wish to retain the productivity of the ground. This is one of the important reasons why private property has so often been a means of preserving the ground from pollution and soil erosion. Wherever private property is compromised or unenforceable—"free" air, "free" streams, "free" oceans, "free" land—we find ecological disturbances. Men rush in to get "their" share of the "free" goods, with little thought of the future, simply because they have little or no control over the future use of public property. In contrast, they can control the future use of their own property. The costs of ownership come from their capital resources. These costs provide a great incentive to use the resources in a cost-effective manner—one which respects the future expected benefits of the resources. There is a strong tendency, though not an invariable law, for men to take better care of the creation when they are allowed to take possession of

the fruits of their labor on their parcel of the creation. Again, it is scarcity which pressures innately lawless men to observe God's laws concerning the creation.

The curse of the ground is a form of grace to the godly—an unearned gift—for it allows them to work out their faith with less fear and trembling concerning the actions of the ungodly. It is also a form of grace—an unearned gift—to the ungodly, for it allows them to work out the implications of their anti-Christian faith in ways that are less harmful to other ungodly men, godly men, and the creation: grace leading to destruction (Luke 12:47–48). [North, *Luke*, ch. 28] The ungodly are given life. They are given power. They participate in history—a stay of execution. Their labors increase the wealth of covenant-keepers, since people all share in the blessings of greater productivity. Common curse (sweat, death, and thistles), common grace (time and incentives to cooperate), special curse (final judgment), and special grace (salvation): all are involved in God's retaliation against evil. [North, *Genesis*, ch. 12:C]

A. The Biblical Concept of Scarcity

I have argued that the basis of scarcity is finitude. God is infinite. The creation is not. Therefore, people have always faced limits. They want more than they are able to get at zero cost. That was the problem facing Adam. He resented his finitude. He wanted to be as God.

There is a problem with defining scarcity as an aspect of finitude. There is one aspect of the universe that is infinite: duration. Humanists who believe in the heat death of the universe deny this, but that is because they are humanists. They do not want to think of the lake of fire as an eternal condition. I do not blame them. But there are no limits on temporal extension. This is the teaching of Christianity, and it has been from the beginning. Heaven and hell are temporary; the new heaven and the new earth and the lake of fire are not. Heaven has to do with time on earth in the present world. There is a connection between the two. We read: "When the Lamb opened the fifth seal, I saw under the altar the souls of those who had been killed because of the word of God and the testimony which they held. They cried out with a loud voice, 'How long, Ruler over all, holy and true, until you judge those who live on the earth, and until you avenge our blood?'" (Revelation 6:9–10). After the final judgment, there will be no distinction between heaven and history. The same is true of hell. The only lengthy dis-

cussion we have of hell is in Luke 16, and it has to do with time. The rich man asks Abraham to go back and warn his brothers about what is to come. This means that his brothers were still alive. This means that hell has a relationship with time in the present cursed order. As with heaven, this will not be true in the lake of fire. There will be no distinction between hell and the lake of fire. "Death and Hades were thrown into the lake of fire. This is the second death—the lake of fire" (Revelation 20:14). There will be no relationship between the lake of fire and the new heaven and the new earth, which will replace the present temporal order. There will be no progress in the lake of fire, but it will be eternal. It is of infinite duration. So are the new heaven and the new earth.

Adam and Eve faced scarcity—above all, a scarcity of knowledge. This scarcity will continue until the end of time, which is bounded by the final judgment. When the curse is lifted after the final judgment, covenant-keepers will be in the ethical condition of Adam and Eve before the fall. But there will be no further temptation to sin. History will be behind us, but eternity will be in front of us. Forever. Busy, busy, busy. Maybe we will not have to sleep. Think of all we will be able to accomplish.

God is infinite. We will never know everything that can be known about God. We will never become God. We will never have the self-knowledge that God has. We will never have knowledge of the universe comparable to that which is possessed by God. We will dwell in infinite duration. We will also have infinite learning ahead of us. There will be plenty of time to exercise dominion. When I say plenty of time, I mean all the time in the redeemed world.

When we read of a major discovery, the article usually records something like this. The person who made the discovery says this: "This discovery has raised more questions than it has answered." This reality will accompany every discovery for all eternity. There will never be a discovery to which this statement is not applicable. That is because we are finite. Even though the universe is also finite, we will never know as much about it as God knows about it. We will never dwell in a period of eternal duration in which we will exhaust our knowledge about any tiny aspect the universe, because to do so would mean that we have exhausted God's knowledge of this tiny aspect.

If this is true, there will always be prices. There will be exchanges throughout eternity. There will be cooperation among people. There will be

specialization of knowledge. In other words, the division of labor is inherent in the nature of man's social order. There is no escape from it. That is because there is no escape from finitude.

This is why scarcity is not a curse. It is an incentive for men to cooperate. The division of labor enables us to increase our output with the same amount of resource inputs. This is especially true of knowledge. Knowledge is the key resource in the modern world, and it will be an increasingly important resource as we learn more. There will be ever-greater economic incentives for men to cooperate in the division of labor.

Over time, tastes change. The fundamental taste that is not going to be satisfied is the desire for greater knowledge. In other words, this statement will never be true: "other things remaining constant." Covenant-keepers can be sure that their taste for knowledge will never be satiated. It will never remain constant. It will accelerate. We will be ever-more curious about how the world works.

I have argued in Chapter 54 of the *Teacher's Edition* that this fact refutes the economists' concept known as equilibrium. Equilibrium assumes omniscience on the part of mankind. It is inherently a demonic idea. With each increase in knowledge, there is always going to be an even greater increase in our awareness of the limits on our knowledge. *The more we learn, the more we will learn about how little we know.* This is an eternal condition.

Creativity is sequential. It takes time. This is the message of the first chapter of Genesis. Creativity after the final judgment will continue to be sequential. There will never be an end to the creativity of mankind. We will never get enough of anything. We will surely never get enough of everything. But we will not be discontented with our condition. That would mean being discontented with the fact that we are not God. That is Satan's discontent, and it will be forever. It is a horrendous curse. He will never get over it. Here, I am speculating, but I think what I am saying here is consistent with the Bible's limited revelation about Satan.

Scarcity points to eternity. That is because finitude points to eternity. Scarcity is basic to the human condition. The covenant-keeping human condition will extend beyond the grave. There is therefore a fundamental distinction between the scarcity imposed by finitude and the scarcity imposed by God's curse in the garden. The second scarcity is going to be removed after the final judgment. The first form of scarcity will never be removed. Men will never become God.

B. The Biblical Concept of Cost

The concept of cost is crucial in economic theory. The problem is this: humanistic economic theory does not offer a coherent, consistent theory of cost. The textbook definition sounds good: the value of the thing foregone. But this does not acknowledge the existence of a dualism between subjective value and objective value. This dualism is a permanent dualism in humanistic philosophy. In this section, I present the dualism as it applies to the concept of cost. Before I do this, I present the biblical solution to this dualism. It has to do with God's imputation of value and cost.

1. The Theology of Cost

The word of God is given to men for many reasons, but one of these is to enable them to reduce their costs of economic action. This enables them to fulfill the terms of the dominion covenant with minimal expenditures of scarce economic resources. In other words, the word of God is given in order to prevent waste.

Because God is the sovereign Owner of the world (Psalm 50:10), it is understandable that He expects us to work efficiently as honest, hard-working, and smart-working stewards of His property. *God's revelation of Himself and His law-order is our primary cost-cutting device.* This revelation comes from a wholly omniscient God who controls all events, yet it is divinely designed to match the capacities of man, a creature. God's revelation fits the mind of man, even as it fits the total creation. It offers us a tool of dominion. Men are offered a capital asset that reduces the cost of the most expensive and crucial of all scarce economic resources: information. Revelation reduces information costs, and in doing so, it thereby frees up other scarce capital assets—time, effort, money—that otherwise would have to be expended in testing. In fact, God's revelation offers us a way of action without having to test certain aspects of reality that are, by design, beyond the ability of man to test accurately. "The secret matters belong alone to the Lord our God; but the things that are revealed belong forever to us and to our descendants, so that we may do all the words of this law" (Deuteronomy 29:29). *God's written revelation frees us from the demonic pursuit of exhaustive knowledge*—a knowledge that must be totally perfect if it is to be reliable, since any aspect of creation could conceivably influence the operation of any other aspect of creation. *The self-proclaimed autonomous man must*

therefore master all of the universe in order to be confident concerning his mastery of any small fragment of it. The covenantally faithful man does not bear this epistemological burden. God is omnipotent, and He has provided him with the revelation of Himself and the rules of order necessary for prosperity and success in man's enterprise of dominion.

There are costs associated with our choices. There are "real" costs, meaning objective costs, meaning costs imputed by God to each acting individual (Luke 12:48). God's subjective (personal) imputation of cost is the equivalent of a truly objective cost. Every act of man therefore has eternal implications; every idle word must be accounted for on the day of judgment (Matthew 12:36–37). There is no escape from the objective costs of our actions. Nevertheless, there are also subjective costs imputed by acting men to their own and others' actions. Men make choices in terms of imputations and estimations, concerning both the present and the future. They are constantly searching for better, less costly, more accurate ways of imputing costs and benefits to the choices that confront them. They act in order to benefit themselves as they interpret benefits. Sometimes they make accurate estimates despite universal opposition, as Caleb and Joshua did when they voted to go to war against the people of Canaan (Numbers 14). But they must make estimations and make decisions in terms of these estimations when confronted with choices over which they have the power of action.

2. Costs and Choice

I have argued that the judicial aspects of the dominion covenant are superior to the economic. Trusteeship is superior to stewardship. I have focused on responsibility. I have argued that the greatest benefit of the private property legal order is the tight connection between ownership and responsibility.

I have also argued that the Bible's private property legal order leads to the free market economy. This moves the discussion from law to economics. There are many possible economic defenses of the free market economy, but none so strong, from a biblical point of view, as this one. *The free market economy provides men with an institutional and legal framework for making choices in terms of each man's expected benefits and each man's expected costs.* The free market economy closely links together choice, costs, and benefits. It makes each acting man responsible for his own actions in a direct fashion. It decentralizes the decision-making process, making possible

the effective use of more and more specialized information—the division of intellectual labor. In other words, it allows each man to work out his own salvation (or damnation) with fear and trembling (Philippians 2:12b). It forces each man to bear the burdens of responsibility for his own actions. If he imputes accurately and plans successfully, then he reaps the rewards. If he fails in his task, then he bears the burden of failure. The "carrot and stick" both serve as motivational devices. The market provides a forum for testing the economic validity of his decisions, namely, price signals that can be used to estimate profit and loss. The subjective economic imputations of acting men, along with the registration of their actual decisions through a price system, combine to produce objective results. Men are taught to respect objective economic knowledge, even though this knowledge is the product of millions of subjective imputations. Their enterprises turn a profit or a loss. Their subjective imputations come face to face with hard, objective reality.

Another benefit of the free market is the rapid transmission of economic data. Men are taught to respond to the real world in an efficient manner, meaning rapidly. They are told whether or not they need to change their imputations and actions. They are told in a forceful manner: profits or losses. The faster they learn of their errors, the faster they are likely to alter their practices. The more forcefully the costs of their errors are registered, the faster they are likely to alter their practices.

Adam and Eve made the most expensive transaction in human history. We assess cost in terms of the most important or valuable use which we have to give up when we choose another economic (scarce) good or service. Cost is best defined as the most beneficial alternative which we must forego. [North, *Genesis*, ch. 11:D]

A cost is the highest-value thing that we must give up in order to enjoy something else. This is easy to say, but it is remarkably difficult to identify, especially if you have not read extensively in free market economic theory. Let us say that you want to buy an item for 20 one-ounce silver coins. You surrender the coins to a seller. You receive the item. This exchange cost you whatever those 20 coins would have bought. You presumably are richer than you were before the transaction. You own something of greater value to you than the 20 coins. If you decide immediately to sell the item, and the item, now used, will bring only 19 coins, the transaction has cost you one coin. Even if you do not think about selling the item, you should mentally

deduct this value of this coin from the value of the item. Most people do not think about this expense, at least not for low-price items.

Perhaps this definition of cost is more easily understood by means of non-market transaction. When a man marries, he publicly swears not to love any other woman. She swears the same regarding him. He gives up a future choice; so does she. This act reduces to zero the God-given supply of other people eligible to marry. He understands this with respect to his permanent marriage costs. He decides that the price is worth it. But the value of the foregone opportunities is not all of the eligible women on earth. Rather, it is the value of the opportunity to marry one other woman who is eligible and who also might agree to marriage. As one of my professors said when I was age 20: "You marry the most available person when you are most vulnerable." This is a highly limited supply at the point of highest demand. This results in a high price.

This definition of cost as the most valuable item foregone by your decision applies both to money and time. When we are children, the principle seems more applicable to money than to time. We think we have a lot of time. We think in terms of *the money value of time*, which is low. The marginal value of our money is higher than the marginal value of our time. As we grow older, this ratio begins to shift in favor of time. We think in terms of *the time value of money*. This is because it is far easier to gain more money than to gain more time. One of the marks of maturity is the shift from the mentality that thinks in terms of the money value of time to the time value of money. Someone who starts using a financial calculator early in life to make his economic decisions has a great advantage over someone who doesn't.

Rich men accumulate money, but average life expectancy is close to the same. When you buy a life insurance policy, the premiums you pay will be the same for everyone in your age group, gender, and health lifestyle. The policy does not ask how rich you are. This is because, statistically, you will live as long as someone who is worth a hundred times what you are worth—or five times less. The rich man may be able to afford a far better physician than you can afford, but if you both get the same kind of cancer, the recommended treatments will be the same. If you both have health insurance, you will not be at a statistical disadvantage in terms of life expectancy.

C. The Humanistic Economists' Concept of Costs

At this point, I must introduce some seemingly arcane ideas regarding cost. I want you to understand the epistemological problems facing humanistic economists. Students are not introduced to these issues until graduate school, if then. I published this originally as the introduction to an appendix on my economic commentary on Exodus: *Authority and Dominion*. It is Appendix H: "The Epistemological Problem of Social Cost."

1. The Cost of Reading

I begin here with a question: "What is it worth to you to finish reading this chapter?" You will never know for sure this side of the final judgment. This question is analogous to a far more important question in life, "What will it cost me to marry this person?" Both questions really mean: "What will I have to give up forever?" While the "foreverness" of the marriage decision is more obvious to us—"till death do us part" is a graphic covenant phrase—the "foreverness" of every decision is analogous, though not of the same order of magnitude.

When I choose *this* rather than *that*, I forever forfeit *that*, as well as all the little *thats* which might have been born later on. Perhaps I can change my mind later on, and buy *that*, but it will not be the same *that* which I choose not to buy today. It is a later *that*. Like a high school sweetheart whom you marry only after your first spouse dies, time has worked its changes on both of you. Everything that a person might have accomplished with *that* during the period of "*this* rather than *that*" is gone forever.

In making any decision, we must forfeit many things that might have been but will never be—indeed, a whole lifetime of things that might have been—but we never know exactly what. Every decision, moment by moment, is to some extent the proverbial fork in the road. We cannot predict the next eight moves and counter-moves in a chess game: moves that will become reality in part because of expectations regarding the next move. So, it is safe to say that we cannot know what life has in store for us because we do one thing today rather than another. If you read this chapter, it is because you think it will be "worth your time." But what is your time worth? What is your time worth *right now*? It is worth whatever is the most valuable use to which you can put it. What is the cost of spending your time one way rather than another? The value of the most valuable use you must fore-

go. So, what is your decision? "To read or not to read, that is the question!"

Decisions, decisions. Once our decision is made, we put the past irrevocably behind us. "The moving finger writes, and having written, moves on." We then face the consequences of our decision. But these consequences—these costs—are imposed on us *after* the decision, not before. They are costs, but they are not costs that affected the original action. *Expected* costs affected the original action, not the *actual* costs that we in fact subsequently experience. Is this unclear? Ask the person who married the "wrong" spouse to explain the difference between expected costs and resulting costs.

2. Buchanan on Costs

James Buchanan, who won a Nobel Prize in 1986, in *Costs and Choice* (1969) distinguished between two kinds of costs: choice-*influencing* costs and choice-*influenced* costs (pp. 44–45). Choice-influencing costs are inherently unmeasurable by any scientific standard. The economist insists that, like beauty in the eyes of the beholder, these economic costs exist only in the mind of the decision-maker. They are subjectively perceived, and only subjectively perceived. And yet, and yet . . . there really are beautiful women and ugly women, and just about everyone can discern the difference, including the respective women *(especially* the women). But how is this possible? How can we deny the objective reality of beauty in the name of a "higher" subjective reality, when we know this? In order for our subjective appraisals to have meaning, there had better be an objective reality undergirding them. After all, two and two make four. Or do they? Does the objective answer depend on the subjective evaluator? The modern mathematician is not really sure. I discussed this in Chapter 4, Section E: "The Dualism of Mathematics."

The costs that influence our decisions are always subjective evaluations of future potential consequences. Once we act, however, objective reality takes over, replacing our mental forecasts with cold, hard facts. (And yet, and yet . . . in order to be perceived by us, these cold, hard facts must first be warmed in the microwave ovens of our minds.) Thus, concluded Buchanan: "Costs that are influential for behavior do not exist; they are never realized; they cannot be measured after the fact." The dream becomes reality, but the reality is always different from the dream, at least to this extent: the dream could not be measured; the reality can be. Supposedly. Maybe. We hope. Buchanan argued that the choice-influenced costs that are subsequently

imposed on people as a result of some previous decision are in some sense objective and measurable—so many forfeited dollars of income, for example—but these real-world costs did not affect the original decision in any way. Yet even this doffing of the economist's cap to objective cost theory may be overly respectful, given the presuppositions of modern subjectivist economics. The *meaning* of these *objective*, choice-influenced costs—e.g., accounting costs—must be *subjectively evaluated* by the person who personally bears them. A number in a ledger is supposed to convey accurate and economically relevant information in order for it to be effective as a summary of past events. The individual who pays an accountant thinks he is getting something for his money. What is he getting? A bunch of numbers on a page? Or information? The individual must interpret the significance of this information. There is no escape from subjectivism.

Consider your own situation. You are still reading this chapter. You still have faith. Let us consider a hypothetical possibility. With the time you spend reading this chapter (assuming you stick with it to the bitter or delightful end), you might be able to think of an investment strategy that would make you rich, but because of something you will read here, you will never think of it or have the courage to risk it. On the other hand, you may also avoid an investment that really would bankrupt you. Instead, you choose to read this chapter. Which would be the outcome? You cannot know for sure. You will never know on this side of the final judgment. You can only guess. So, what is the true cost of reading this chapter?

If we take seriously the modern economist's discussion of costs and choices, we find our world disturbing. We never really know what our actions are costing us, assuming that it is true that there is no way to relate our subjective evaluations before we act with objective costs after we act. This disturbing lack of certainty can be relieved, however. Paul wrote: "We know that for those who love God, he works all things together for good, for those who are called according to his purpose" (Romans 8:28). But this suggestion is hardly helpful to the modern humanistic economist. We can of course sit around moaning and groaning about a past cost: the abandoned dream that might have come true. We can worry retroactively about what our decision has cost us. But the cost that really counted—"counted" is in fact misleading, since there was nothing objective to count—at the moment of our decision was imposed at that moment.

What is past is past. This is what the economist says of all decisions.

Decision-makers are necessarily forward-looking. The past is gone forever. We must do the best we can with whatever we have today. This is the doctrine of *sunk costs*. This is not to say that we do not bear the objective costs that are imposed by a previous decision. We do. Even if we do not perceive these costs, we bear them. A madman may not understand that he is not Napoleon, but he bears the social costs of his delusion when he is placed in an insane asylum. There can be no escape from objective costs, any more than from subjective costs. But whether we accurately foresaw these costs or not, they are the result of that action, not its cause. These costs are borne by us objectively in history, yet they are always subjectively borne. One person may bear his burden in good cheer; another is utterly oppressed by what objectively (i.e., to an outside evaluator) appears to be the same magnitude of burden. Who is to say whose evaluation is correct? Only the omniscient God can do this, and His evaluation is not objectively measurable by the economist. This does not refute its existence. God imputes. God judges. God renders final judgment. There will be a day of reckoning—of counting and evaluating.

3. Pure Subjectivism

An exclusively subjectivist view of cost and choice can lead to some very odd conclusions. (So, for that matter, can any other exclusive line of human reasoning.) G. F. Thirlby followed the logic of the one-time decision and concluded: "Cost is ephemeral. The cost involved in a particular decision loses its significance with the making of a decision because the decision displaces the alternative course of action." This is Buchanan's view. Thirlby said emphatically that "cost figures will never become objective; i.e., it will never be possible to check whether the forecast of the alternative revenue was correct, because the alternative undertaking will never come into existence to produce the actual alternative revenue."

What does this mean for the accounting profession? What does it do to the very concept of personal or corporate budgeting? He did not say, but he did not stop, either. Following the persuasive logic of subjectivism, Thirlby concluded that "The cost is not the things—*e.g., money—which will flow along certain channels* as a result of the decision; it is a loss, prospective or otherwise, to the person making the decision. . . . cost *cannot be discovered by another person who eventually watches and records the flow of those things along those channels*." Then of what objective use are accountants?

Why was the advent of double-entry bookkeeping such a revolutionary event in the history of civilization? He did not say.

Furthermore, what does such a view of budgeting do to the idea of the free market as a social institution for producing economic order—objective economic order? What does such a view do to the idea of the stock market, since money prices for shares are the means by which decision-makers evaluate the past performance of all other participants in the market? What does the price of a share of corporate stock have to do with expected future performance of that corporation's management? What is the link, if any, between present share prices and future economic performance? How do we get from subjective value to objective share prices and back again? How do we preserve our capital? For that matter, how do we measure our capital? How can we bridge the gap between the world of purely subjective costs and objective market prices? Buchanan insisted: "*Only prices have objective, empirical content. . . .*" Then precisely what empirical content does a price possess or reveal, and how do we discover it or make effective use of it—subjectively and objectively, personally and socially? In short, *what does an objective price have to do with individual subjective value*? What is the *economic meaning* of a price—individually and socially, subjectively and objectively? This is the number-one epistemological problem that has beset modern economics since the 1870s. Modern economic theory rejects the idea of a God who imputes economic value authoritatively.

Buchanan made this statement: "Any profit opportunity that is within the realm of possibility but which is rejected becomes a cost of undertaking the preferred course of action." But Buchanan neglected any consideration of the economics of a rejected opportunity that is not in fact—objective fact—within the realm of possibility. We normally call such an opportunity a loss. Wouldn't avoiding a loss be a benefit of undertaking the preferred course of action? If the decision-maker's first choice is to reject the objectively impossible (i.e., unprofitable) course of action for whatever reason, and also to reject the second, objectively possible, course of action for whatever reason, won't he remain in the profit column overall? I do not want to press this line of reasoning too hard because it bogs us down too deeply in the philosophical problem of available and unavailable information, but we need to recognize at least the nature of the epistemological problem: *if everything is completely subjective at the moment of decision, what does "the realm of possibility" have to do with anything*? Maybe the decision-maker

believes that he could achieve something great if he just had the courage of his convictions, when in fact he would have gone bankrupt. Is his true cost the forfeited unattainable greatness or the forfeited inevitable bankruptcy? If all costs at the time of his decision are purely subjective, then his cost must be the forfeited greatness he believed he would attain. This, clearly, is nutty—logical but nutty. So is any theory of cost and choice that is exclusively subjective.

The economist, no matter how hard he tries to tie human decisions exclusively to the action-taker's subjective evaluations, cannot escape the bedrock realm of possibility. Possibility is his measuring rod for discussing cost, a "ruler" without which all economic discussion becomes theoretically impossible. On the other hand, no matter how hard he tries to make objective that realm of possibility, through probability theory and other statistical techniques, he cannot escape the subjectivity of the decision of the acting individual who is responsible for his actions. The economist needs—yes, needs—a scientific theory of cost that is both subjective and objective without being eternally dialectical. Such a scientific theory does not exist in humanistic theory.

Conclusion

For as long as individuals make choices, they will face scarcity. For as long as there is human action, men will face scarcity. There is no scarcity in hell (Luke 16), and there will be none in the subsequent lake of fire (Revelation 20:14–15). That is because no human action is possible in hell and the lake of fire. Men are not able to improve their conditions through voluntary exchange. Hell and the lake of fire are the only places in creation where men can escape scarcity. People will remain finite, but they will no longer be under the constraints of the dominion covenant. There will be no exit.

Scarcity today is cursed by God. It will not be cursed in the post-historical new heaven and new earth (Revelation 21, 22). But there will still be the scarcity that is associated with finitude. We are not omniscient, omnipresent, and omnipotent. God is. But God in His grace has given us tools of dominion that enable us to overcome steadily the curses of scarcity. To the extent that men conform themselves to God's Bible-revealed laws, they will live in a society that progressively reduces the limits imposed by God's curses. This is the biblical basis of the hope of economic growth.

In this chapter, I have described a few of the epistemological problems

associated with evaluating costs and benefits. Humanists have no idea of a sovereign God who imputes meaning to our actions. This God also imputes costs and benefits to our actions. Because He is sovereign, His imputations are economically and judicially objective in history and at the final judgment. Because we are made in God's image, we have some perception of these objective imputations. We can estimate costs and benefits. We are required to do this. "For which of you who desires to build a tower does not first sit down and count the cost to calculate if he has what he needs to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it will begin to mock him, saying, 'This man began to build and was not able to finish.' Or what king, as he goes to encounter another king in war, will not sit down first and take advice about whether he is able with ten thousand men to fight the other king who comes against him with twenty thousand men? If not, while the other army is still far away, he sends a delegation and asks for conditions of peace" (Luke 14:28–30).

15

DIMINISHING RETURNS

Esau took his wives, his sons, his daughters, and all the members of his household, his livestock—all his animals, and all his possessions, which he had gathered in the land of Canaan, and went into a land away from his brother Jacob. He did this because their possessions were too many for them to stay together. The land where they had settled could not support them because of their livestock. So Esau, also known as Edom, settled in the hill country of Seir (Genesis 36:6–8).

Analysis

This section is an extension of Chapter 31 of my commentary on Genesis. This is the second great division of families recorded in the Book of Genesis. The first one was the division between Lot and Abraham. The same reason was given in both instances: "The land was not able to support them both living close together, because their possessions were very many, so that they could not stay together" (Genesis 13:6). We are not told why the land would no longer support the families and flocks of the two sons of Isaac. It may have been that the Canaanites were numerous, and that the families were able to occupy only a tiny fraction of the land of Canaan. Obviously, when the exodus from Egypt brought 600,000 men and their families (Exodus 12:37) back into the land, it was sufficiently productive to support them. Nevertheless, the Bible is clear: neither Abraham and Lot nor Esau and Jacob could raise their cattle on whatever land was available to them. The curse of the ground (Genesis 3:17–19) made itself felt. The families had more living wealth than the land could support.

The result in both cases was a movement outward geographically from a central location. Lot headed toward Sodom. Esau went to Seir. The limited resource of land suitable for herds and flocks, when coupled with the multiplication of animals, was an incentive for the fulfilment of the dominion covenant. "God blessed them and said to them, 'Be fruitful, and multiply.

Fill the earth, and subdue it'" (Genesis 1:28a). The scarcity of land in relation to the fecundity of man's domesticated animals has produced a geographical spreading out of mankind.

A. The Law of Diminishing Returns

These men faced the law of diminishing returns, an economic doctrine made famous by the English economist David Ricardo in his important book, *Principles of Political Economy and Taxation* (1817). The basic idea had been discussed by economists of the late eighteenth century, when Sir James Steuart and the Baron de Turgot both published treatments of the topic in 1767. Steuart's formulation, later called the law of the "extensive margin," observed that as population increases, poorer and poorer lands are brought into cultivation in order to feed the newcomers, so that equal amounts of productive effort yield progressively smaller harvests. (Of course, this statement of the problem implicitly assumes that other factors remain constant, especially agricultural technology.) The second formulation, put forth by Turgot, is far more relevant, the so-called law of the "intensive margin." Joseph Schumpeter's summary of Turgot's position is a good one. As equal quantities of capital (or labor) are applied to a given piece of land, the quantities of the product that result from each application will at first increase, then decrease. If more applications of the same resource are added, given a fixed quantity of land and fixed technology, then output will eventually fall to zero. Schumpeter wrote in his *History of Economic Analysis*: "This statement of what eventually came to be recognized as the genuine law of decreasing returns cannot be commended too highly." He went so far as to say this: "It embodies an achievement that is nothing short of brilliant and suffices to place Turgot as a theorist high above Adam Smith" (p. 260).

1. Variable Proportions

After 1900, American economists termed this observation by Turgot "the law of variable proportions." First there is an increase, then a decrease in output per unit of resource input. This is easiest to understand in the case of agriculture. Assume that you own three factors of production: land, seeds, and water. You plant the seeds. Unless water is added, nothing will grow. These are complementary factors of production. You add water. Over time, the seeds will become plants. The transformation is large as a percentage rate of return: from no plants to plants. Say that you add more water.

Depending on the recipe or formula, there may be even more output. But, at some point, the addition of more water will produce a lower rate of return per additional unit of water. If you continue to add water, new plants will not grow. There is too high a percentage of water. The ground is waterlogged. If you continue to add water, the returns will become negative. The existing plants will die. You will have fewer plants than you had earlier in the process.

Assume that there is a single acre of land. One man works the land by himself. He has trouble lifting large rocks, and he cannot move boulders. Rolling logs is very difficult. Then he hires an assistant. Now certain jobs become manageable, and some, which were previously impossible, become possible. The total output produced by two men may be more than double the cost of each man's wages. So, the owner of the land hires another man, and another, and another. Eventually, the men begin to get in each other's way. Production sags. Costs increase. It no longer pays to hire more men. It may even pay to fire one or more of them. Marginal net returns—the profits from the addition of one resource factor to the "production mix"—eventually fall to zero, or even becomes negative. The costs of employing an additional laborer eventually exceed the benefits derived from that additional laborer.

This is precisely the problem that Jacob and Esau faced. Within the confines of the available land, the two families could no longer remain productive. The land had "filled up." This did not mean that cattle were standing side by side, or that the tents of Esau's servants were right next to those owned by Jacob's servants. But the productivity of the land was falling noticeably. The output of cattle, whether in numbers, or weight, or however the two family leaders measured output, was falling because there were too many of them for the relatively fixed supply of land. Esau reached a major decision. He left in order to find a more profitable "mix" of cattle and land. He went searching for the "wide open spaces." This demonstrates the importance of the curse of the ground for the goal of geographical dominion. Because every single acre of ground has been cursed by God, productivity per acre has been restrained. Those wishing to multiply their flocks or crops are eventually forced to subdue more ground. They cannot remain on that original plot of ground and progressively expand the physical output of goods. If they want more wealth, they must seek out available land to bring under cultivation. Their desire for greater wealth impels them to bring more land under cultivation.

In the case of land, the law of diminishing returns tells us that there are limits on the soil's ability to sustain life. If a land user refuses to acknowledge the existence of such limits, then his attempts to expand output by adding more and more complementary factors of production—more seed, more laborers, more water, etc.—will eventually deplete the soil. This is one technological reason why Israel was required to rest the soil one year in seven (Leviticus 25:1–7). [North, *Leviticus*, ch. 23] Before the soil is completely exhausted, the law of diminishing returns will make itself felt. Output per unit of resource input will decline. The farmer will have to add fertilizers, use new technological devices, implement a system of soil-replenishing crop rotation, or allow the land to lie fallow if he is to save the value of his land. The law of diminishing returns therefore provides men with an economic incentive to care for the land and make it fruitful by acknowledging and honoring its limits.

2. Beyond Agriculture

The law of diminishing returns is not limited to agriculture. It is basic to all economic production. The limits of scarcity are everywhere. Schumpeter's discussion of this point is informative. Both Steuart and Turgot spoke of agriculture only. In 1900, this would not have astonished anybody, since it was then established practice to restrict the law of decreasing returns to agriculture. Economists today understand that neither increasing nor decreasing returns are restricted to any particular branch of economic activity but may prevail in any branch, provided certain general conditions are fulfilled. They do not recognize how surprising this intellectual breakthrough actually was.

The correct explanation for this lack of understanding before 1900 seems to lie in the fact that, to the unsophisticated mind, there is something particularly compelling in the limitations imposed upon human activity by an inexorably "given" physical environment. It takes prolonged effort to reduce the analytic importance of these limitations to their proper dimensions, and then divorce them from the soil and the industry that works the soil. Yet it should not have taken so long to see that there is really no logical difference between trying to expand output on a given farm vs. trying to expand output in a given factory. If farms cannot be indefinitely multiplied or enlarged, neither can factories. The additional explanation required is provided by the belief of practically all classical economists: while one fac-

tor (land) was given once for all, the other original factor, labor, would always increase to any amount required if allowed to do so. If we adopt this view, we can sympathize with the reluctance of those authors to treat labor and land alike, and then apply the laws of physical returns impartially to both. In other words, *all economic resources are limited*. Put another way, at zero price, there is greater demand for most goods than supply of these goods. This is what defines a scarce resource.

No single resource or good can provide us with all the output we could ever want. There is no magic formula, no genie in a bottle, that can provide us with an infinite supply of desirable goods and services. We cannot turn stones into bread—not at zero cost, anyway. The limited productivity of land, and the limited supply of land, force us to search out new supplies of land when our productivity presses against the limits of the land. But the same restraints apply to all resources. No asset is infinitely productive. If we want more steel, we must build more steel mills, unless we can develop a cost-effective technology that enables us to expand steel production in the same factory.

The curse of the ground also implies a curse on man: *technology is not infinitely expandable*. Contrary to Schumpeter, there are decreasing returns to technology. Man is not originally creative, nor is he infinitely creative. He is a creature. In any case, even if we admit that men have enormous powers of technological creativity, there are two further limits that can never be overcome: time and capital. It takes time to develop and install a new technology, and it takes capital resources. The day of judgment limits the first factor, and the curse on the creation limits the other. The rate of interest—the discount we apply to future returns—also limits the application of technology. Men will not and cannot give up all present consumption. For this reason, there is an inescapable discount rate applied to future income as against present income.

3. Negative Returns

Whatever man turns his hand to will eventually produce negative returns (losses) if the producer insists on adding ever-greater quantities of complementary resources to a fixed supply of any particular resource. He will have to search out new ways of combining these resources, or find quantities of the overextended factor of production that can be purchased or rented at prices that enable him to increase the value of his production's

final output. His desire for increased wealth impels him to devote energy, capital, and time to subduing his portion of the earth.

In the early phase of the production process, the resource owner sees an accelerating rate of return to this marginal factor. He has moved from a single factor of production, which is not autonomously productive, to a joint production process. The rate of return accelerates. But as the original factor is swamped by additions of the marginal factor, the law of decelerating returns asserts itself. There is too much of the marginal unit in the process.

When we speak of a production process as a recipe, we clarify the matter. In any recipe for a meal, there is an optimum mix of ingredients, at least for the tastes of a majority of those who eat it. The cook must plan accordingly.

In a market economy, there are objective indicators: prices. There is also an accounting system. When the objective price of a marginal input and the objective monetary return from this unit reveal negative returns, the manager is alerted to stop adding another marginal unit. He does not make this judgment in terms of subjective value, whether his or the buyers'. He judges by prices. The price system conveys useful information. He knows when to stop.

B. The Tragedy of the Commons

This was the title of an influential article in *Science* (13 December 1968), written by biologist Garrett Hardin. He argued that land that is not privately owned by the person using it is far more exposed to reckless soil depletion and ecological devastation. This is the so-called "tragedy of the commons," in which the political authority owns the land and leases it out (or even temporarily gives it away free of charge) to private or public uses. The man who benefits immediately from its use—running animals on it, stripping it of its trees, camping on it, digging minerals out of it—has little direct incentive to conserve its productivity. If he had exclusive use of it for many years, he might, but that is almost the same as reintroducing private ownership. His personal benefits are directly and immediately realized; the costs associated with the depletion of the resource are borne by all taxpaying citizens—an infinitesimal additional cost to the actual user. Because it is not his land, he need not conserve its long-run productivity. A kind of positive feedback occurs. It generally pays to add one more cow or cut down one more tree, unless the variable costs—supervising the cow, sharpening the saw, spending the time—have risen so high that even the "free" land is

not a sufficient subsidy to continue production. The positive feedback process can continue until an ecological crisis hits. Then the productivity of the "free" resource plummets. The negative feedback of the law of diminishing returns is temporarily blunted, because the retarding factors—increased costs of maintaining the long-term productivity of the resource—are not forcefully registered in the mind of the user. Others also bear these costs, and his personal benefits far outweigh his share of them.

Eventually, the law visibly reasserts itself, since it is a regularity based on a real fact: the curse of the ground. But the looming crisis may give few warnings, at least few that the user will recognize or respect. It comes all at once, not in smaller portions that an owner of private property would be more likely to recognize and take steps to alleviate or reverse. Without private ownership of the means of production, the law of diminishing returns does not produce those warnings concerning the impending advent of radically reduced output from an over-used resource. Or, more accurately, the warnings are not heeded so rapidly. Economists call this the problem of externalities.

It is extremely difficult and costly for bureaucracies to evaluate the long-run effects of the use of any publicly owned resource. The costs of upkeep in relation to the benefits of use are evaluated by different people. The reality of the subjective theory of value asserts itself. The bureaucrats in charge of managing or leasing the public property must estimate the value produced by the users of the resource, but this is impossible to estimate accurately without prices. But even prices do not tell the administrators everything they wish to know. Is the subsidy to the public of "free" land, for example, really the best way to benefit the public? How can any bureaucrat determine the answer? Are the costs too high? Again, how can he put a price tag on the costs if the asset is publicly owned and therefore not subject to the subjective evaluation of costs by its legal owners, the voters? Who is to say whether the bureaucrats' assessment of the "true" costs and benefits to the "public" are the same as the "public" would assess them? And how is the "public"—a collection of individuals—to register its collective judgment? Who pays the piper, whose ox will be gored, and who eats the cake?

The management of publicly owned resources tends to swing between policies of overuse and no use, between (1) the profligate squandering of resources through "free" leases that lead to erosion, and (2) the mandated inactivity that leads valuable assets to sit inactively. First, the bureaucrats

allow erosion; then they require total conservation, which means that productive assets are rendered unproductive, or productive only for those few people who enjoy using the resource in a legally acceptable way, such as hikers who enjoy the wilderness, but who do not enjoy the sound of chain saws or other tools of production. The Puritans of New England learned these lessons early. After 1675, with almost half a century of mismanaged common lands behind them, they steadily sold off the communally owned property to private owners. The bickering about who was to pay for the cattle herders, how many trees were to be cut down yearly, whose fences were in disrepair, and the costs of policing the whole unmanageable scheme, finally ended. So ended the "tragedy of the commons."

C. Dominion and Diminishing Returns

When structured by means of the private ownership of scarce resources, the law of diminishing returns becomes an incentive for the extension of the dominion covenant. Men reach the limits of productivity of a particular production process. They are then forced to find better methods of production, or find additional quantities of some overextended factor of production. They must either intensify production through better technology and more capital, or else search for more of the resource that has reached its limits of productivity under the prevailing production "formula" or "recipe." The overextended resource may be land, a building, the labor supply, managerial talent, forecasting skill, or any other scarce economic resource. When its limits are reached, men have an economic incentive to find new ways of accomplishing their goals. They may have to re-think their goals because the costs have risen, or else they must find ways to reduce the costs of achieving their goals. Or they may have to settle for a combination: modified goals and reduced costs of production. But they must change. Along with many other factors, the law of diminishing returns makes change inevitable.

The culture that economic change produces in a profit-seeking society in which the private property system prevails is dominion-oriented. The earth is subdued, if not because men aim at subduing it for God's glory, then at least for individual profits. The general dominion covenant is furthered. By fostering conservation, the quest for long-term returns from the ownership of any productive resource also tends to preserve the productivity of the earth. The dominion covenant is not to serve man as an excuse to destroy the earth. Because men failed to give the land of Israel its rest, they

went into captivity for 70 years (II Chronicles 36:21). They were warned not to misuse the soil.

We must pay a price for a productive asset: the expected rate of return from that asset, meaning a stream of income over time, discounted by the rate of interest. We have an incentive to maintain that resource's productivity. We are pressured to count the costs of ownership and use. The law of diminishing returns is inescapable. We must recognize the limits of scarcity. Having recognized these limits, we are to find ways to mitigate scarcity's burden in lawful ways by expanding output, improving our techniques of production, and buying more capital resources. We must count the costs and evaluate the benefits. We become winners or losers as individual decision-makers. If output falls when we add more inputs, we are pressured by falling profits to discover why. We are told by the profit-and-loss accounting statements that we are now overusing a particular resource, and that we must stop doing so if we are to keep from wasting resources. The search begins for more of the overextended resource or for techniques of production that compensate for the falling productivity of the present production mix. The dominion covenant is extended.

Conclusion

In Esau's case, he decided to leave. His decision led to the establishment of Edom. It also allowed Jacob to increase his family's holdings, at least until the time of the great famine when they journeyed to Egypt. The Canaanites who dominated the land in the era of the famine enjoyed their independence after that famine until Israel's conquest. Both Jacob and Esau were to increase their dominion of the earth as a result of the law of diminishing returns. It forced them to seek new lands to conquer.

The law of diminishing returns applies to every area of production. It is not only agriculture that is subject to it. This means that in every industry, the law of diminishing returns forces business owners to seek new ways to produce products less expensively by adding different factors of production or by using new formulas. The search for a more productive mix of factor inputs furthers dominion.

16

EFFICIENCY

Now Abel became a shepherd, but Cain cultivated the soil (Genesis 4:2b).

Analysis

The Bible says that domesticated animals and agriculture were basic to society from the beginning. Adam named the animals on day one (Genesis 2:19–20). This means that he classified them. He was also told to develop the garden (Genesis 2:15). [North, *Genesis*, ch. 8] This means he understood agriculture. God on day one gave him sufficient knowledge to begin to develop the earth: animal and agricultural. Adam would have to learn about details. General principles were insufficient.

God cursed the ground after the fall: ". . . cursed is the ground because of you; through painful work you will eat from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field. By the sweat of your face you will eat bread, until you return to the ground, for out of it you were taken. For dust you are, and to dust you will return" (Genesis 3:17b–19). [North, *Genesis*, ch. 12] Adam had agricultural knowledge. He understood what God had done. When God ejected Adam and Eve from the garden, He dressed them in animal skins (v. 21). They probably watched Him do this. They learned.

Adam taught his sons about both lines of food production. They specialized early in their lives. Cain became a farmer. Why? Abel became a herdsman. Why? The answer is this: each had a brother to trade with who lived nearby. Each could specialize in his production. Why did they specialize? Because each of them had skills and interests that were different. Each recognized early that he would be more productive by specializing in what he knew best and then trading with each other. This is the division of labor at work. It is made possible economically because of trade. Economists have a word for the economic reason for specialization: efficiency. Each participant can gain greater net income by specializing and the trading a potion of

his output. This means that each participant devotes fewer resources to production in order to gain the same subjective economic value from his production mix: information costs, time, raw materials, and capital.

This specialization was not based on geography. Each of them had the whole world to choose from, except for the sealed-off garden. Instead, they lived near enough to each other to trade easily. This means that the differentiation in production had to do with knowledge, not geography. This knowledge was technical and intellectual. It involved the knowledge of cause-and-effect. Part of this knowledge was theoretical. Part of it developed over years of hands-on practice. The longer that each man specialized, the less likely that he would switch careers. He would have to gain too much knowledge to compete with the other brother. He would be a low-output worker for several years.

A. The Inefficiency of Darwinian Social Evolution

One of the most widespread myths of social evolution is that all men were originally hunters. Agriculture became common about 12,500 years ago, we are told. It became common only in the Middle East. The agricultural revolution transformed the world. It made possible towns and then cities. Typical is Wikipedia's entry for "Neolothic Revolution."

> The Neolithic Revolution, Neolithic Demographic Transition, Agricultural Revolution, or First Agricultural Revolution was the wide-scale transition of many human cultures during the Neolithic period from a lifestyle of hunting and gathering to one of agriculture and settlement, making an increasingly larger population possible. These settled communities permitted humans to observe and experiment with plants to learn how they grew and developed. This new knowledge led to the domestication of plants.
>
> Archaeological data indicates that the domestication of various types of plants and animals happened in separate locations worldwide, starting in the geological epoch of the Holocene around 12,500 years ago. It was the world's first historically verifiable revolution in agriculture. The Neolithic Revolution greatly narrowed the diversity of foods available, resulting in a downturn in the quality of human nutrition.

Consider what this implies. Homo sapiens supposedly evolved about 300,000 years ago. This was in Africa. For the next 287,250 years, human beings hunted animals to survive. In a long Wikipedia article on "Human evolution," we read this: "Around 50,000 BP [before present], modern human culture started to evolve more rapidly. The transition to behavioral modernity has been characterized by most as a Eurasian 'Great Leap Forward', or as the 'Upper Palaeolithic Revolution', due to the sudden appearance of distinctive signs of modern behavior and big game hunting in the archaeological record. Some other scholars consider the transition to have been more gradual, noting that some features had already appeared among archaic African *Homo sapiens* since 200,000 years ago." Even if this was as late as 50,000 B.C., these people were intellectually slow. It took 37,500 years to discover agriculture, move into towns and settle down. Knowledge then expanded rapidly, people spread across the face of the earth, and today they have smartphones. Tomorrow? Who knows?

Here is the social problem facing Darwinian social evolutionists. If the human brain has not changed much over the last 300,000 years, why did it take so long for mankind to figure out that planting seeds would provide a far more predictable and far lower-cost supply of food than hunting? Why were they so slow? Why were they so inefficient for so long? It was not biology—a lack of intelligence. Then what?

The Bible's account makes far more sense. Mankind had knowledge of animal husbandry and agriculture from the beginning. This was a matter of specialized knowledge. This knowledge became even more specialized over time. Output per unit of input therefore increased. This means that producers became more efficient. This did not take millennia. It became commonplace with the sons of Adam.

B. Efficiency: Production and Consumption

Efficiency is a category that applies to mankind as producers and consumers. The idea of efficiency is an extension of the idea of cost, which is an extension of the idea of scarcity.

I argue that we are far more efficient as producers than consumers. There are reasons for this that are consistent with economic theory, both Christian and humanistic.

1. Efficient Production

What do economists mean by efficiency? This is not an easy question to answer in theory, as I shall explain in Section C. The most widely used definition of efficiency has to do with production: *obtaining greater output per unit of resource input*. This idea is the equivalent of reducing waste. The economists' concept of efficiency was summarized memorably by a socialist, Upton Sinclair, in his popular 1904 novel, *The Jungle*, which was about the meat packing industry in Chicago. "'They don't waste anything here,' said the guide, and then he laughed and added a witticism, which he was pleased that his unsophisticated friends should take to be his own: 'They use everything about the hog except the squeal.'" This phrase was incorporated into the American language: "everything but the squeal."

Efficiency owes a great deal to double-entry bookkeeping, which was invented in Europe in the second half of the fifteenth century. This system enables businesses to track expenditures precisely. The slow but steady replacement of Roman numerals by Arabic numerals and the decimal system reinforced the adoption of double-entry bookkeeping. Gutenberg's printing press allowed the inexpensive printing of books about these accounting techniques. These techniques spread into the Western business world. All of this accelerated in the second half of the fifteenth century. Innovations in business spread fast because of low-cost printing. Economic theory teaches this: "When the price falls, more is demanded." This surely applied to printing. Metal type-based printing changed the world, beginning in the West. Beginning around 1500, the combined economies of Western Europe began to grow more rapidly than the economies of China, India, and the newly created Ottoman Empire.

Business budgeting has always been a driving force of literacy. Whenever there is a discovery of ancient tablets in the Middle East, the bulk of them are business accounting records and tax records. Businessmen are forced to pay close attention to numerical accounts. Why? Because they are in search of money: the most marketable commodity.

Consumers possess money. They have a wide range of choices. Businessmen must specialize production in order to persuade consumers to part with their money. They gain their competitive advantage by means of specialized information in narrow markets. They must pay close attention to costs. If they fail to do this, they will be replaced by more efficient, less

wasteful competitors. They will go out of business. They have greater incentive to find ways to reduce waste than consumers do as per capita wealth increases. *Consumers do not need to specialize; producers do.* Producers must specialize in what future buyers of specific products will buy. Consumers mentally count on future sellers to be there to sell when they want to buy. They can therefore safely afford to be less focused on the specific components of their discretionary spending. The richer they become, the more discretionary spending they possess. The wider their range of choices becomes. This is the best definition of increasing wealth: more choices available from the same expenditure of resources, especially labor time.

2. Inefficient Consumption

I have commented on the anti-waste outlook of American businesses in 1900: "everything but the squeal." This outlook was basic to mass production, which visibly began to replace small-business production in the 1870s: Carnegie (steel), Rockefeller (oil), and the railroads. Mass production was driven by cost-cutting and price reductions. Henry Ford adopted this strategy in 1908 with the Model T car.

This same anti-waste outlook was basic to American consumer culture until after World War II (1941–45). Here are two representative phrases: "Waste not, want not." "Use it up, wear it out, make it do, or do without." Ths outlook goes back to Benjamin Franklin's aphorism in the mid-eighteenth century: "A penny saved is a penny earned." The Great Depression (1930–1939) reinforced this outlook. But, after 1945, this outlook began to fade. As per capita output increased and wages increased, most Americans no longer faced economic hardship. A new outlook and a new budgeting strategy replaced the old: consumerism funded by debt. This is the essence of Adam Smith's vision of personal economic motivation: "Consumption is the sole end and purpose of all production." It was at this time that Keynes' theory of the consumption-driven economy gained control over academic economics. Demand-side economic theory displaced supply-side economic theory. Keynes replaced J. B. Say. This was marked by Paul Samuelson's textbook, *Economics*, which appeared in 1948.

In the 1950s, America's postwar economic production techniques began to spread across the Western world. Per capita output increased as per capita investment increased. So did per capita income. This enabled most people in the West to escape the psychological burden of the fear of deprivation.

There was no return of either economic depression or world war. The West's process of capital investment and technological innovation spread into the Third World. It began to be visible in Asia after 1950: Hong Kong, Japan, South Korea, Taiwan, and Singapore. This process of poverty elimination has continued to spread to mainland China (1979–), post-Communist Russia (1991–), and India (1995–). The subsistence income lifestyle is being eliminated rapidly. This is the result of about two centuries of compound economic growth, interrupted only by the Great Depression. This truly is a new economic world order. It is exclusively the product of industrial capitalism, which is in turn the product of the private property legal order.

Consider the smartphone. No consumer product has ever spread so rapidly around the world: less than a decade after 2007. When we think of the most pervasive home consumer products—the telephone (1900), electric lighting (1900), the automobile (1908), radio (1920), television (1947)—none attained worldwide dominance as fast. This testified to worldwide wealth. Billions of people could afford them. Widespread access to the World Wide Web (1990) was available because of the graphical browser (1995). This was the second-fastest consumer technology in wordwide adoption.

As per capita income increases, will people exercise better taste in using their smartphones than they have in the first decade? The answer depends on their worldview. If their worldview is that of economic theory ever since Adam Smith, they will spend a larger percentage of their household budgets of money and time on consumption. As the monetary cost of consumption falls because of the reduced price of digital communications, the most valuable resource that people will consume is time: a nonrenewable resource. If there is social continuity, they will waste lots of time with their smartphones, just as they do today. Middle-class people will buy more expensive smartphones than they can use efficiently for wasting their time. They will buy high-end smartphones for reasons other than efficiency in either personal productivity or their consumption of entertainment.

This raises the question of the subjective economic value scales that individual consumers adopt in assessing their personal criteria of efficiency. At the margin of their daily expenditures of time, they prefer to devote time to consumption rather than working longer hours. This preference is subsidized by the tax code. Leisure time is not taxed; wages are taxed. Next, there is the psychological factor of boredom. People hate boredom. They are inexperienced in dealing with it. Yet there are few studies of boredom. There

is no academic treatise on the economics of boredom. Entertainment alleviates boredom for the masses: video games, movies, television, novels, and popular music. Add to this spending on vacations and travel. The expenditures of the masses points to leisure as their choice. But no academic entrepreneur has entered this field to secure his reputation. The field of leisure economics has not developed.

People in high-technology societies work fewer hours each year because capital-funded new technologies enable them to become more efficient producers. Their rising income is spent on consumer goods. These are goods that are far down on their prior scale of values. The doctrine of marginal utility teaches this. With new patterns of time-allocation devoted to entertainment, their tastes change. They become more dependent on entertainment. This borders on addiction. With respect to some video games, this can become addictive.

Entertainment is immediate. The substitution of entertainment for production is the result of two major factors. First, there is increasing wealth. Second, there is a shortening of time perspective. This shortening substitutes a lower-class outlook regarding time for an upper-class outlook, to use the insights of political theorist Edwin Banfield in the late 1960s. There are four major factors behind this. *First*, people are becoming more present-oriented. Entertainment is habit-forming. It is enjoyed passively. It takes no intellectual skill to watch television. It takes self-discipline to resist the lure of free entertainment, which is not free. Free entertainment consumes time, a valuable resource according to God. Moses prayed: "Our life passes away under your wrath; our years quickly pass like a sigh. Our years are seventy, or even eighty if we are healthy; but even our best years are marked by trouble and sorrow. Yes, they pass quickly, and we fly away. Who knows the intensity of your anger, and your wrath that is equal to the fear of you? So teach us to consider our life so that we might live wisely" (Psalm 90:9–12). *Second*, most people have never been skilled at budgeting their time. The spread of city clock towers in the West after 1200 was a major factor in the history of Western urban productivity. The town clocks enabled employers to enforce time schedules on employees. As for individuals, this retrospective phrase is close to universal among old people: "Where did all the time go?" They seem surprised. They warn young people, who pay little attention. *Third*, when we are not consuming, we devote most of our waking hours to dealing with immediate problems. We defer planning for distant problems.

This phenomenon has a phrase: "the tyranny of the present." *Fourth*, the vast majority of people have always been present-oriented. Their increasing wealth is enabling them to purchase entertainment services that they could not previously have afforded.

As consumers, we are not efficient. When the pressure of competing producers is removed at the end of the working day, we revert to our default setting: leisure. I am not saying that men do not like to work. They do. This is built into us by the dominion covenant. This is why some people have hobbies. Hobbies are not passive entertainment. They require actively allocated time, plus money, plus skill. There is competition from other hobbyists. The Web lets people see what their best competitors have achieved. The pressure of competition calls forth efforts to achieve greater efficiency. Passive entertainment does not.

C. The Price System and Cost Reduction

Prices are unbiased, objective, highly specific records of the money terms of past exchanges. They reveal highly specific information. A price is limited. It does not reveal the non-monetary terms of an exchange. The broader the market, the less detailed are the non-monetary terms of exchange.

Because prices are specific, participants know what they are committing to. Non-participants and would-be participants also know. *Prices convey information*. Decision-makers can assess the costs of their actions in buying or selling specific assets. They can impute subjective value to exchanges, and then they personally impute economic value to the wealth they will have to surrender, net, for making an exchange. The subjective estimations of economic value involve objective comparisons: the money price of an exchange. This money price can be compared with the money prices of other price-determined exchanges. Money prices enable the decision-maker to compare the cost of this decision with the objective boundaries of his wealth, including what he can borrow at a specific rate of interest. *Prices reveal limits*. This is a crucial factor in decision-making. Men are finite. They need reminders of their limits.

With respect to economic efficiency, the decision-maker's goal is to keep his expenditures of money inside the boundaries of his objectively bounded range of possible decisions. He asks: "Can I afford this?" This has to do with the present. He also asks: "Will the subjective benefits that I receive as a re-

sult of this exchange offset the subjective benefits that I will not be able to enjoy?" This has to do with the future. It is an *entrepreneurial estimate*. There will be a two-fold accounting on the other side of the transaction. This accounting will be objective (monetary) and subjective (psychological).

Efficiency has an objective component: *present financial boundaries*. It also has a subjective component: *post-exchange satisfaction*. In business, the financial component is primary. Members of the board of directors do not care about the satisfaction of the senior managers except insofar as they will have to compensate them in the future. In the realm of consumers, the more present-oriented they are, the more they care about subjective satisfaction. The long-term objective budgetary limit of their spending is heavily discounted by lower-class decision-makers. In contrast, it is only minimally discounted by upper-class decision-makers.

Efficiency in business is mostly objective: monetary. Money is the agreed-upon standard of performance by the investment community. In contrast, efficiency in consuming is mostly subjective. Some people ask this: "Will I get my money's worth?" The economist asks: "money's worth of what?" Answer: subjective satisfaction or enjoyment. *Consumption expenditures are individual*. They may be representative for the family. But the head of a household cannot be fired for his decisions. In contrast, *business expenditures are representative*. Managers make decisions to buy and sell legally in the name of owners and on their behalf economically. The owners may decide to reward them or replace them. They face objective sanctions. They have objective incentives to produce a profit. Business expenditures must be below business revenues. These are assessed by means of prices.

D. Efficiency and Worldview

As producers, we face competition. If our competitors are successful, we will go out of business. We will lose our source of income. This is a strong motivation for producers to pay close attention to monetary costs of production. We must focus our attention on a narrow segment of the market, which is the major time allocation of our waking hours. We specialize. We gain expertise. We learn the highly specialized skill set related to selling. If we do not, then our employers do. Specialization in production in an exchange economy requires efficiency: keeping monetary costs below revenues.

This is in sharp contrast to our lives as consumers. Our area of potential responsibility is vast: anything that money can buy, plus whatever non-

monetary assets can buy. Our competition is widely dispersed: shoppers with money. Our attention is therefore dispersed. This is another way of saying that we are not specialized. We therefore do not become experts in consumption in the way that we become experts in production. Why not? Because of money. Money is the most marketable commodity. As consumers, we possess money. A myriad of sellers wants to sell us things. We are bombarded with offers to sell in every area of our lives as consumers, including Web surfing and online viewing of advertising-supported entertainment. Most people do not learn the skills of money management, although free online budgeting programs do exist, and millions of people use them. These are not double-entry bookkeeping programs, but they are detailed. But, compared to the number of people who own smartphones, online budgeting is a niche consumer product. *The richer that people become individually, the less efficient they become as consumers*. It takes greater self-discipline to avoid wasting money and time.

This is why worldviews will become more important in separating efficient consumers from inefficient consumers. Covenant-keepers will accumulate savings. They will become better investors. They will not succumb to the satanic lie of free time. There is no free time. Time is short, both individually and collectively. Jesus said: "We must work the works of him who sent me while it is day. Night is coming when no one will be able to work" (John 9:4). Paul wrote: "Look carefully how you live—not as unwise but as wise. Redeem the time because the days are evil. Therefore, do not be foolish, but understand what the will of the Lord is" (Ephesians 5:16–16). Covenant-keepers will become more skilled at imputing economic value to time and money in the way that God imputes this on their behalf. They will participate in world redemption: buying it back. They will seek first the kingdom of God (Matthew 6:33). They will, in short, abandon this economic worldview: "Consumption is the sole end and purpose of all production." This is the confession of faith of contemporary economic theory. *Smith's assertion is the antithesis of the dominion covenant*. It is the worship of mammon: "more for me in history."

Conclusion

Efficiency is tied in economic theory to the reality of objective costs. In business, these costs are displayed in numerical indicators: money prices. Double-entry bookkeeping is the tool by which businessmen assess the re-

cent efficiency of their businesses. They use accounting standards of monetary profit and loss. Jesus used a similar view of accounting in His parables of the three stewards in Matthew (talents) and Luke (minas). He also used the concept of forecasting in His warning to count the cost (Luke 14:28–32). [North, *Luke*, ch. 35]

The epistemological problem for humanistic economic theory is this: methodological individualism's affirmation of an exclusively subjective imputation of value. There is no conceptual connection between this affirmation and the objective measurement of economic value. This separation goes back to the dualism of medieval philosophy: realism vs. nominalism. More recently, this dualism is basic to Kant's dualism of science vs. personality. A consistent methodological individualist must deny that efficiency is a valid economic concept. Murray Rothbard took this position. He understood that the concept of efficiency assumes the ability of decision-makers to make interpersonal comparisons of subjective utility, which the position denies is possible. But few free market economists have had the courage to follow the logic of their position.

17

EXCHANGE

Two people work better than one; together they can earn a good pay for their labor. For if one falls, the other can lift up his friend (Ecclesiastes 4:9).

Analysis

This passage is a defense of the benefits of the division of labor. Its context has to do with people who are either on someone else's payroll or who are in a joint venture. The benefits of the division of labor extend far beyond this employment setting. What I write here is an extension of Chapter 14 of my commentary on Ecclesiastes, *Autonomy and Stagnation*.

First, consider the Christian theology of this passage. The operational model for this recommendation is the Trinity. God is three Persons. In relation to the creation, each Person has specific tasks. Jesus said of the Holy Spirit, "However, the Comforter—the Holy Spirit whom the Father will send in my name—he will teach you everything and he will remind you of everything that I said to you" (John 14:26). In addition, "When the Comforter—whom I will send to you from the Father, that is, the Spirit of truth, who goes out from the Father—comes, he will testify about me" (John 15:26). Jesus said this of His ministry: "I can do nothing from myself. As I hear, I judge, and my judgment is righteous because I am not seeking my own will but the will of him who sent me" (John 5:30). Within the Godhead, there is a division of labor.

Second, the Bible insists that finitude is basic to the creation. It is basic to mankind. This inescapable fact of finitude has implications for society. Here is one of the implications in the area of economic practice: *specialized knowledge*. A person can become well-informed about a few topics, but there are many other topics. When he specializes in order to become an expert, he cannot master most other fields. Ecclesiastes reminds us that there is a way around the limitation of men's knowledge: cooperation. In this case, it is cooperation based on pay. Each of two men wants better pay

for himself. The way for each of them to get better pay is to increase his output. How is this possible? By cooperating with the other person. This joint operation is more efficient than two individual operations. *A well-organized joint venture is more productive than a related pair of well-organized individual ventures*. This is true in every area of life. It is not confined to business.

This text does not give us information on how to organize joint ventures. It is not part of a how-to manual. But it is part of a how-not-to manual. It warns against autonomy. Autonomy is self-defeating in a competitive marketplace. It is not as efficient as cooperation. Output per unit of resource input will be lower than in joint ventures.

A. The Myth of Rugged Individualism

Individualism is rugged. It is rugged because it is inefficient. The division of labor benefits those who are less rugged. They can achieve together what they could not have achieved individually. The division of labor makes each of the participants more efficient. It also reduces risk for all participants. "One man alone can be overpowered, but two can withstand an attack, and a three-strand rope is not quickly broken" (Ecclesiastes 4:12). The larger the community of cooperation, the less there is to fear from invaders.

In the United States, there is a popular legend: America's age of rugged individualism. This legend is usually associated with the development of the West, 1830–1880, which means the comparatively empty land west of the Mississippi River and east of the Rocky Mountains: the Great Plains. The story lacks strong evidence. Except for the isolated fur trappers in the Rocky Mountains from 1810–50, peaking in the 1840s, the settling of the West was a joint effort. There were lots of small family-owned farms, but there was also community. These farms were connected by economic and social ties.

Beginning with Adam Smith, economic theory has always acknowledged the greater productivity of the division of labor. It has not focused on the decision-making of isolated individuals, with the lone exception of the analysis of a hypothetical Robinson Crusoe. He was a rugged individualist. That is to say, he was a low-output individualist. Whenever an economist uses this example, he uses it as an introduction to the division of labor. At some point in the narrative, Crusoe meets Friday, just as he did in the famous novel. At that point, the economist begins to focus on exchange. This has been an efficient teaching strategy. That is why I use the story of Adam

in the garden. That is the original Robinson Crusoe story. In the Preface to the 1993 revised edition of *Man, Economy, and State* (1962), Murray Rothbard wrote this.

> Chapter 1 begins with the action axiom and deduces its immediate implications; and these conclusions are applied to "Crusoe economics"—that much maligned but highly useful analysis that sets individual man starkly against Nature and analyzes his resulting actions. Chapter 2 introduces other men and, consequently, social relations. Various types of interpersonal relations are analyzed, and the economics of direct exchange (barter) is set forth. Exchange cannot be adequately analyzed until property rights are fully defined—so chapter 2 analyzes property in a free society. Chapter 2, in fact, marks the beginning of the body of the book—an analysis of the economics of voluntary exchange. Chapter 2 discusses the free market of barter, and the subsequent chapters treat the economics of indirect—or monetary—exchange. Thus, analytically, the book deals fully with the economics of the free market, from its property relations to the economics of money (p. lvi).

Free-market economic theory is a theory of voluntary exchange. It is significant that the most widely read and most influential college textbook in economics, written by Paul Samuelson, does not begin with Robinson Crusoe. It also does not begin with voluntary exchange. It begins with central economic planning. In the original edition, published in 1948, in Chapter 1, the Introduction, he began with this topic: "Poverty Amidst Plenty." He wrote the following: "Modern economics tries to explain, among other things, how it is the nations are alternatively afflicted with the dizzy ups and downs of business activity" (p. 3). He went on: "It is the first task of modern economic science to describe, to analyze, to explain, to correlate these fluctuations of national income. Both boom and slump, price inflation and deflation, are our concern" (p. 4). In the section on "Economic Policy," he wrote: "This brings us to the important problem of economic policy. Ultimately, understanding should aid in control and improvement. How can the business cycle be diminished? How can economic progress be furthered? How can standards of living be more equitable?" (p. 5). This is the heart,

mind, and soul of Keynesian economics: *government planning to direct the national economy*. It does not begin with individual decision-making. This book marked the beginning of Keynesian influence in academic economics, and it achieved dominance within a few years. I discuss this in greater detail in Chapter 41:8:2

Economic theory always deals with large aggregates of individuals: booms, busts, price inflation, etc. But free market economic theory does not begin with aggregates. It begins with decision-making individuals acting on their own initiative. The crucial policy question confronting free market economic theory in my generation is this: "Does the free market best coordinate the economic activities of individuals, or does the mixed economy of Keynesian intervention best achieve this goal?" The intra-humanist debate between methodological individualism vs. methodological holism goes on continually in modern economics, just as it went on in classical Greek political philosophy. Humanism never comes to a conclusion about either the correct policy or the correct methodological approach to solving the issues of economic policy. My approach is different: *methodological covenantalism*. It is based on the doctrine of the Trinity: unity and plurality, the one and the many.

B. Adam Smith's Pin Makers

Adam Smith began *The Wealth of Nations* with his now-famous discussion of the pin makers. Smith creatively borrowed from an extensive literature in French of the pin-making industry. He never offered any footnotes, which would have gotten him kicked out of a graduate program in economics today, but in the late-eighteenth century, this kind of creative borrowing was common. Here is the passage: Chapter I, paragraph 3.

> To take an example, therefore, from a very trifling manufacture, but one in which the division of labour has been very often taken notice of, the trade of a pin-maker: a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not

> only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straights it; a third cuts it; a fourth points it; a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind, where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth, part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.

This description of a pin factory is an impressive illustration of the increased productivity that is made possible by the division of labor. Smith adopted the logician's strategy of arguing from something that is well known, a pin, to something that is less well-known, the manufacture of a pin. Then, having made his point (sorry; I could not resist), which was primarily a rhetorical point rather than analytical in terms of economic theo-

ry, he went on to the real topic of his book: the increased productivity and therefore increased national wealth that is the result of voluntary exchange. He was self-consciously arguing against government regulation of business enterprise. That had been the error of his predecessors a century earlier, whom we now call mercantilists.

It is important to understand that *Paul Samuelson represented a return to the methodology of mercantilism*: government planning of the overall market economy. But there was this difference: the mercantilists were self-consciously writing to defend the expansion of state power for the purpose of expanding the state. Samuelson argued that planning is for the benefit of people who are trying to keep their jobs safe from economic recessions. The results of these planning policies in both cases were the same: the expansion of the state, the reduction of individual freedom, and the reduction of the wealth of nations.

Workers in a pin factory do not enter into exchanges with one another. There is a central plan within the factory, and the pin makers carry out their assigned tasks systematically. This is why Smith's intellectual achievement was remarkable. He has persuaded most of his readers that his analysis of voluntary exchange, which was an extension of the topic of the division of labor, was a legitimate extension of his description of the vast productivity of a pin-making factory when compared to those with isolated, individual pin makers. Here is his argument. Premise: if we want greater wealth, we must attain greater efficiency in production. Logic: (1) to attain greater efficiency, we must have a greater division of labor; (2) to attain a greater division of labor, we must have additional voluntary exchange; (3) government intervention reduces voluntary exchange. Conclusion: *laissez faire, i.e.,* "allow to do." Let businesses alone.

C. Exchange Is Cooperation

In the pin factory, there is a central plan. Employees are told what to do, and if the tasks are simple and repetitive, this is what they do. In a free market economy, which is essentially a gigantic auction, there is no central plan. There are rules governing the ownership of private property. These rules shape the kinds of exchange practices that develop out of them. How is it, then, that the exchange of goods and services between individual owners creates the division of labor that makes possible the massive increase in productivity that we see in a pin factory? If the productivity of the factory

depends on the central plan, why doesn't the productivity of the market economy also depend on the central plan? The most incisive answer to this question is Ludwig von Mises' 1920 essay, "Economic Calculation in a Socialist Commonwealth." He argued that without prices created in open markets, government economic planners would not have accurate knowledge. They would not know what to produce.

This is the issue of economic planning. This raises these questions. First, where is the locus of legal sovereignty to make the plan? Second, how does this legal sovereignty, which is individualistic, produce an economy that is as efficient as a centrally planned pin factory? Third, if legal sovereignty is individualistic, why is the productivity of an individual pin maker so much lower if he works by himself in his shop, and not in a factory?

The answer, according to Smith and other free market economists, is this: exchange is based on the greater efficiency of the individual in knowing what is efficient in his own field. He has specialized information. He is self-interested with regard to improving his condition in life. To maximize his productivity, he needs to find a market for the output of his specialized information. Economic theory's analysis of efficiency applies to any person who decides to make an exchange. When two people decide individually that they can improve their individual conditions by cooperating, the same kinds of efficiency associated with the productivity of a factory become available to each of the individuals. Each person specializes in what he does best, just as each of the pin makers specializes in what he does best. Each person makes use of invested capital, just as each of the pin makers makes use of invested capital. The difference is this: *each of the business owners owns his own capital*, whereas the pin makers do not own the capital that makes them productive.

There is a famous aphorism: "You scratch my back, and I'll scratch yours." Neither party can efficiently scratch his own itching back. In a joint back-scratching venture, each of them gets his back scratched. Although very few unmarried couples ever enter into this peculiar exchange, the aphorism is easily understood.

Why do people enter into an exchange? To accomplish something jointly that they cannot efficiently accomplish by themselves. They make this decision as individuals. They see an opportunity for cooperation. Each of them wants what the other one possesses. They can exchange information. They can exchange services. They can exchange products. What they usu-

ally exchange is money for knowledge, services, and products. One person gives up money. The other person gives up knowledge, or skills, or a product that he produces for a living. But both of them are exchanging services and goods. Money simply makes the exchange process more efficient. It makes it easier to locate people who are willing to make an exchange.

One of the themes that I keep coming back to is this: *people are mainly exchanging specialized knowledge*. Sellers of goods and services profit most by selling the output of their highly specialized knowledge, which includes skills. They make most of their income from the sale of their specialized knowledge, not from the sale of the raw materials that may go into producing a product.

Each of the exchanging parties believes that he can put the highly specialized services of the other person to profitable use in his own enterprise. Each of them has specialized information, including knowledge of specialized markets. Each of them sees opportunities for greater profit by employing the knowledge possessed by the other person. The other person doesn't see these opportunities. So, each offers to make an exchange. If what each of them is offering to the other person is more valuable to the other person than it is to him, then each of them benefits by becoming owners or at least renters of the other person's knowledge and skills. Neither of them has the opportunity or the time to find out about all of the opportunities available to the other person. Each of them enjoys the economic benefits available from this crucial barrier to entry: specialized knowledge of his own market niche. Neither of them greatly fears the competition of the other in his own field. So, they can cooperate at low risk of loss.

The exchange takes place because each of them values what the other possesses more than the other person values it. Each thinks: "I want what he owns. He wants what I own." Each of them profits by exchanging ownership of what he owns. Let us apply this analysis to ourselves. This means that achieving greater efficiency in production would not be worth the effort if we were the only consumers of our own output. Individually, we would cease to be very productive. *We would stop specializing*. We would stop concentrating our efforts on lowering the cost of whatever it is that we produce. We would have to learn so much about all the other things that we consume, which are things we do not know how to produce, that we could not concentrate on producing the things that we produce really well. Our income would drop. Why? Because our productivity would drop. Furthermore, everybody in our

society would be experiencing the same kind of reduction of productivity and therefore the same kind of reduction of income.

In a face-to-face barter exchange, each of the parties had better be something of a salesman. Each of them has to persuade the other of the mutual benefits of the exchange. One of them goes into detail about the benefits that the other person can obtain by owning what he is selling. The other one is making the same kind of sales pitch. But there is a problem. It is rare that two people who own two different items happen to come across each other. It is also uncommon for each of them to be a good salesman. So, each of them prefers to sell whatever he owns for money. Each of them sells only to people who really want to buy what he is selling. In this way, each of them maximizes his money income. Then each of them goes out to buy what he really wants to own. Everybody benefits, including the middlemen who make the transactions easier, meaning less expensive, more rapid, and more predictable.

D. Marginal Utility and Production

Economists refer to a phenomenon they call marginal utility. It is the subjective value we impute to the unit of something we are thinking about buying. We compare this expected value with the value of the identical unit that we already possess. The value to us of the last item that we bought or produced for ourselves is worth more to us than the value of the next identical item that we might buy or produce for ourselves. This means that the more units that we have in inventory, the less value we subjectively impute to the next one. "Enough is enough!" So, we go looking for someone who will impute high value to the next item that we produce. It would be even nicer if we could find someone to buy our entire inventory at the listed retail price.

Meanwhile, prospective buyers of whatever we produce to sell are doing the same thing with whatever it is that they produce. Here is the law of efficiency. The better that we are at producing something, the more items that we can produce for a given outlay of money, time, and other economic resources. However, as we learn from the law of marginal utility, the more of them that we produce, the less valuable they will be to us for direct consumption or use. Their marginal utility will keep getting lower for us. We are already overloaded with them. We have warehouses full of them. The only reason why we keep producing them is this: we hope that a few people

out there will impute high subjective value to them, and will therefore give us money in exchange for them.

A pin maker is not interested in using any of the pins he produces. I don't care if he is a pin maker on a factory floor or a pin maker in an isolated shop. He has more than enough pins to last him a lifetime. But he does not have more than enough money to last him a lifetime. So, he (or his employer) goes shopping for a buyer of his pins. The pin buyer is doing the same with whatever it is that he produces.

Our highly specialized knowledge as producers is of little value to us if all that we can do with our knowledge is produce goods and services for ourselves. Admittedly, this may not be true of a hobby fanatic. If somebody enjoys doing something for the pleasure of doing it, he may continue to do it. He may seek greater knowledge about how to do it. His production is really consumption. He may not suffer from decreasing marginal utility in *his hobby as a whole* because he keeps finding new aspects of his hobby that he wants to learn about. So, other things do not remain constant over time. With respect to knowledge in any category or niche, there is always more to learn. Some of this knowledge may be valuable. Or maybe it is fun to learn for its own sake. So, we keep studying.

Therefore, when I speak of our motivation for gaining ever-more specialized knowledge, I am speaking of increasing our opportunities for increasing our income by greater cooperation through exchange. We continue to accumulate greater knowledge. We pay money to get greater knowledge. We keep reading books in our field. We visit websites. We do whatever we can to become more knowledgeable about whatever it is that we sell. But we would not do this if there were no market for the output of whatever our knowledge has enabled us to produce.

This is why anything that threatens the auction process that we call the free market is a threat to our wealth. This is because it is a threat to our productivity. This is because any reduction in the number of potential opportunities to sell the output of our specialized knowledge reduces the value of our specialized knowledge. If I know how to do something that is uniquely valuable to others, but the market has been closed or severely reduced by some government regulation, the market value of my knowledge is reduced. I now have less incentive to cooperate with other people. They have less incentive to cooperate with me. All of the people who might otherwise have entered into exchanges suffer a reduction in their wealth. The eco-

nomic value of most of the things that people own falls because their personal wealth falls. Therefore, they impute less value to all of those specialized things they own that are now worth less because of a reduction in the division of labor. *Their wealth falls because the market value of the output of their specialized knowledge falls.*

E. The Starving Jack of All Trades

There is an aphorism in English: "Jack of all trades, master of none." It refers to someone who is marginally more skilled than most people in several areas, but who is not sufficiently skilled to compete against a specialist in any of these fields. In a world of an increasing division of labor that results from increasing knowledge that is funded by increasing capital investment, the jack of all trades cannot earn a middle-class living. Nobody wants to purchase the services that he is qualified to deliver. A specialist in each of the fields is easily available. So, hardly anybody purchases the skills of someone who is a jack of all trades.

In an isolated community in which there are no specialists, someone who is a jack of all trades can make a decent living. He can supply services to most of the families in the region. An isolated community in which there are no specialists is a community with a low division of labor. It is therefore a poverty-stricken community. There is not enough output in this community to attract the services of specialists. These people have little money to spend on anything. They live mainly through barter.

As soon as specialists begin to arrive in the community as the community gets richer, the jack of all trades finds himself close to unemployable. He has to perform services in those remaining niches of the local economy in which a specialist has not yet arrived. Once a specialist arrives, he is soon out of business in that specialty. At that point, people in the community would like to have another specialist in each field, so that the specialists will compete against each other. This will keep prices low. (The one exception to this is the legal profession. A lawyer welcomes the arrival of another lawyer. Together, they will do quite well. Their competition will increase their net income.)

In Western civilization, there is great respect for the somewhat mythological figure known as the Renaissance man. This was an individual who was highly skilled in a number of artistic fields. The archetype of such a Renaissance man is Leonardo da Vinci. He did many things quite well. But in

an economy with a high division of labor, Leonardo would have to specialize in the field in which he has a competitive advantage if he intends to make an above-average living. Nobody would pay for his not-quite-competitive output in those fields in which he is far better than the average journeyman, but not better than specialists who sell the same product or service.

Economists point out that somebody who does two things very well would be wise to concentrate on whatever he does that generates the greatest income. If he continues to devote hours to both jobs, he will receive less income per hour. He should specialize. Even if he is a more efficient producer than some other supplier in the economy, he should still specialize in whatever generates the most income. Any time that he spends producing for a market that does generate maximum monetary income is either wasting his time or else is something of a hobby.

Conclusion

Voluntary exchange is a means of cooperation. In a modern economy, voluntary exchange is by far the most widespread means of cooperation. Buyers and sellers do not know each other's names. They do not spend valuable time getting to know each other. They do not worry about taking advantage of each other. They do not spend valuable time bargaining verbally about the price. Instead, a buyer goes into a store, or onto an online shopping site, to order some item. When a sale takes place, the buyer and the seller are cooperating with each other. They are also cooperating with the middlemen who made the exchange possible. This is why Jeff Bezos in 2020 was the richest man in the world, even after his divorce. (His ex-wife is now one of the world's richest women.) He is the middleman of middlemen in the world. He is the major shareholder of Amazon.

The main thing that is being exchanged in any economic transaction is information. Each party to the exchange has specialized information. Each of them is making this information available to the other at a price. This spreads the benefits associated with specialized information. *Accurate information is the most valuable economic resource.*

The market process is a way for buyers of goods and services to persuade people with accurate specialized information to go into production. The market process lures owners of valuable specialized information into the marketplace. It does so by means of the offer of money. The competition among all of the holders of specialized information benefits consumers who

purchase the output of this information. Furthermore, the fact that many of the exchanges are made on public markets is an additional benefit to society as well as individuals. The prices of these exchanges convey important information about the conditions of supply and demand in the thousands of capital markets. With the Internet, people can shop for the best price or the best quality or the best combination of quality and price. Yet it costs them only time spent in shopping plus an Internet connection to take advantage of what is essentially free information. As the price of accessing this free information falls, more of it is demanded. This means that there will be greater cooperation. *This sharing of information through the Internet is the greatest single source of economic growth in the world today.* This is because accurate knowledge is the most valuable of all scarce resources. It is spreading around the world more rapidly today than at any time in the history of man. The international division of labor is progressing at a pace inconceivable half a century ago. Yet this pace will seem pathetically slow by the standards that will prevail half a century from now.

18

ECONOMIZING

So the men turned from there, and went toward Sodom, but Abraham remained standing before the Lord. Then Abraham approached and said, "Will you sweep away the righteous with the wicked? Perhaps there are fifty righteous within the city. Will you sweep it away and not spare the place for the sake of the fifty righteous that are there?" Far be it from you to do such a thing, killing the righteous with the wicked, so that the righteous should be treated the same as the wicked. Far be it from you! Will not the Judge of all the earth do what is just?" The Lord said, "If I find in Sodom fifty righteous within the city, then I will spare the whole place for their sake." Abraham answered and said, "Look, I have undertaken to speak to my Lord, even though I am only dust and ashes! What if there are five less than fifty righteous? Will you destroy the whole city for lack of five?" Then he said, "I will not destroy it, if I find there forty-five" (Genesis 18:22–28).

Analysis

Thus began the Bible's most famous story about negotiating. Abraham was negotiating with God. Why did he have both the courage and the effrontery to do this? Because he had just entered into a covenant with God (Genesis 17), he believed that God was willing to negotiate with him. He was correct.

1. Abraham's Other Negotiations

This is the most detailed account in the Bible regarding the process of negotiating the price of an exchange. But this was not the first time that Abraham negotiated. After his rescue of his nephew Lot from the invading king Chedorlaomer, he was offered a reward by the king of Sodom, one of four regional kings whose subjects and goods had been stolen by Chedorlaomer. Abram had also liberated them. "The king of Sodom said to Abram,

'Give me the people, and take the goods for yourself.' Abram said to the king of Sodom, 'I have lifted up my hand to the Lord, God Most High, Creator of heaven and earth, that I will not take a thread, a sandal strap, or anything that is yours, so that you can never say, "I have made Abram rich." I will take nothing except what the young men have eaten and the share of the men that went with me. Let Aner, Eshkol, and Mamre take their portion" (Genesis 14:21–24). This verbal exchange took place immediately after Abram had tithed 10% to Melchizedek, priest of Salam. Abram gave a tithe to him, for Melchizedek was God's covenantal agent, but he took nothing from the king of Sodom.

Abram wanted to uphold God's sovereignty. That was his supreme goal. God had called him out of Ur. He had obeyed God's call. So, after Lot's rescue, Abram gave all credit to God, including his tithe on the spoils of wars. For this reason, he refused to accept a gift from the king of Sodom. He chose to be in debt to no man, either economically or symbolically. He maintained this attitude four decades later, when he negotiated with Ephron, a landowner in Canaan, for the purchase of a field for burying his wife. Ephron offered to give the field to Abraham. Abraham refused. Instead, he paid a high price. "Abraham listened to Ephron and Abraham weighed out to Ephron the amount of silver that he had spoken in the hearing of the sons of Heth, four hundred shekels of silver, according to the standard measurement of the merchants" (Genesis 23:16). He did not negotiate for a lower price. He paid the price that Ephron had said the field was worth (v. 15).

His behavior was contrary to the analytic presupposition made by economists: *people prefer more*. Another way of saying this is this: *everyone wants to pay the lowest price*. But this universal assumption has an unstated qualification: "other things being constant." Abraham saw clearly that there were invisible strings attached to the gifts: an implicit declaration about the hierarchy of authority. *He who gives away a scarce resource is higher on the chain of authority than the recipient*. Abraham would not surrender his high position as a representative of God.

In contrast, he tithed to Melchizedek, even though Melchizedek did not ask him to. On the contrary, Melchizedek first gave Abraham a meal. "Melchizedek, king of Salem, brought out bread and wine. He was priest of God Most High. He blessed him saying, 'Blessed be Abram by God Most High, Creator of heaven and earth. Blessed be God Most High, who has given your enemies into your hand.' Then Abram gave him a tenth of every-

thing" (Genesis 14:18–20). Abram fully understood that Melchizedek was higher on God's chain of command than he was. Melchizedek was a priest who offered a meal of bread and wine. (That is the New Testament church's communion meal.) The epistle to the Hebrews declares that Melchizedek's priesthood was superior to Levi's (Hebrews 7). Abraham paid tithes to him, and this acknowledged his subordination (Hebrews 2:17–3:1). [North, *Epistles*, ch. 21]

2. Negotiating With God

With this as background, you can better understand the economics of Abraham's negotiation with God. He was negotiating about the destruction of Sodom. Three men had approached him immediately after the covenant ratification of circumcision. They told Abraham that his wife would conceive and produce a son. Abraham was age 99. This seemed impossible to his 89-year-old wife, who laughed (Genesis 17:17). Little did the couple know that, 38 years later, after she died at age 127 (Genesis 23:1), Abraham would depart from Isaac's land, remarry, and produce six more children (Genesis 25:1–2).

The three men were on a mission. They were headed toward Sodom. With no introduction, the text then says that God told Abraham what the mission was. God was going to Sodom to see if the sin of the city was as bad as the reports indicated. He implied that if His investigation confirmed this reports, He would destroy the city (v. 21). In chapter 19, we are told: "The two angels came to Sodom in the evening, while Lot was sitting at the gate of Sodom. Lot saw them, arose to meet them, and bowed down with his face to the ground" (v. 1). They were messengers of judgment, as the text soon reveals. The narrative implies that two of the men who had met with him had been angels. Then who was the third man? Presumably, it was God, who was appearing as a theophany. He visibly was a man. This was the Person Abraham began to bargain with. Abraham kept pressing God to lower the number of men required for Him to spare the city. They eventually settled on an agreement: ten men (v. 32). "The Lord went on his way as soon as he had finished talking with Abraham, and Abraham returned home" (v. 33).

We are not told what Abraham's goal was. We know this much. Abraham's nephew Lot lived in Sodom. When he had first journeyed to Sodom, he was the owner of many animals. This is why he and Abram separated. There was insufficient land for both flocks (Genesis 13:5–11). Lot must have

sold his sheep in order to live inside the city. Abraham presumably was haggling with God in order to spare Lot the trouble of having to start over in life. *Covenantally, Lot would serve as a judicial covering for the city.* God graciously entered into a session of bargaining. He knew that there were only four covenant-keepers in the city: Lot, his wife, and his two daughters, all of whom fled before judgment came. God could easily afford to settle on ten people as the minimum required. This number would not justify sparing the evil city.

Abraham was acting as an unofficial, unpaid trustee for Lot. Abraham persuaded God to spare the city for the sake of 50 righteous people. If there were only 49, then Lot would be forced to move to avoid destruction. Abraham concluded that, as Lot's trustee, it would be better if he could persuade God to accept a lower price. Maybe God would be willing to do this. Abraham could not read God's mind. There was always a possibility that God would give Abraham what he was asking for at a lower price. Abraham had the mental outlook of a skilled bargainer. "You never know!" Sure enough, God settled for less. So, Abraham asked for an even lower price. God agreed. The bargaining continued.

Why didn't Abraham initially ask God for the lowest price that Abraham was willing to accept: five people? Because he was using a strategy that he had probably learned long before: do not insult the person on the other side of the transaction with too low an offer when you first begin the negotiating process. His response might be this: "Do you take me for a fool? I would never accept that low a price." That would end the negotiation. By adopting an experienced negotiator's tactic of initially asking for a marginally lower price, Abraham kept the negotiating process going. This took patience. It also took a sense of when to stop. This was all a matter of guesswork for Abraham. But there were positive signals. Because God kept agreeing without making a counter-offer, Abraham assumed that God might accept a lower offer. He was correct. God accepted a final offer that was 20% of Abraham's original offer. At that point, Abraham ceased negotiating.

This story indicates that there is nothing immoral about negotiating. This story has come down through millennia as a validation of the strategy. If there were something wrong with negotiating, God would not have been a party to a negotiation with an entire city at stake.

Abraham appealed to God's mercy. "Will you sweep away the righteous with the wicked?" (v. 23). "Far be it from you! Will not the Judge of all the

earth do what is just?" (v. 25). This was a declaration of his faith in God as a God of mercy. By appealing to God's mercy, he was acknowledging the possibility of the city's future redemption by God. At the same time, if fewer righteous people were found in the city than the lowest number (price), then God's agreement guaranteed the city's total destruction. Lot and his family would have to flee with nothing. The flocks were no longer his. His wealth was invested inside the city.

God was in a stronger bargaining position than Abraham. He knew what Abraham was thinking. Abraham did not know what God was thinking. Also, God knew what the moral status of the city was. Nevertheless, He sent angels there to confirm the rumors. He conducted a thorough investigation. Then He brought permanent judgment against the city and all but four of its inhabitants. The city became a model of evil and the consequences of evil. Almost two millennia later, this became a model for God's judgment on the biological heirs of Abraham. Jesus told the disciples: "Whatever town you enter, and they receive you, eat what is set before you, and heal the sick that are there. Say to them, 'The kingdom of God has come close to you.'' Whenever you enter a town and they do not receive you, go out into its streets and say, 'Even the dust from your town that clings to our feet we wipe off against you! But know this: The kingdom of God has come near.' I say to you that on the judgment day it will be more tolerable for Sodom than for that town" (Luke 10:8–12).

When the negotiations were over, they separated. "The Lord went on his way as soon as he had finished talking with Abraham, and Abraham returned home" (v. 33). Abraham had just made a contract with God. This was a follow-up to his covenant with God. He already had confidence that God would honor the terms of this contract. He had confidence that God would honor the terms of the covenant. He had such confidence that he circumcised all the males of his household. This public ceremony was a visible testimony of his confidence in God's words. God had offered him benefits: the inter-generational inheritance of his as-yet unborn heir. This was an answer to his original question: "Abram said, 'Lord God, what will you give me, since I continue childless, and the heir of my house is Eliezer of Damascus?' Abram said, 'Since you have given me no descendant, see, the steward of my house is my heir.' Then, behold, the word of the Lord came to him, saying, 'This man will not be your heir; but rather the one who will come from your own body will be your heir'" (Genesis 15:2–4).

A. Searching for a Better Deal

In Chapter 2, I discussed the covenant model as it applies to economics. Section F is devoted to five economic laws. The third law is foundational to the market process: "People prefer more." I added this qualification: *at the same price*. This is the source of the individual mental process that economists call economizing. When Americans hear this word, they think "paying less." Someone who pays less money for what he wants is said to be economical. Being economical means "getting a bargain" or perhaps "driving a hard bargain." In the era before supermarket checkout lines and online ordering, this sometimes meant bargaining with a seller. This is what Abraham did with God.

1. The Science of Economizing

Economics is the science of economizing. The most common meaning of the word "economize" is this: *to reduce expenditures*. Someone has made a list of goals. He then seeks ways to minimize his expenditures in obtaining these goals. He devises a plan of action. This process is sometimes described as this: "getting more for less." An economist regards this description as scientifically imprecise. It has two variables: more and less. The economist would give the decision-maker this choice: either pay less to achieve a *fixed goal* or else maximize the value of the purchases by means of a *fixed budget*. Both procedures involve a quest for maximization. Either your goal is fixed or your budget is fixed. Take your pick.

This is the economist's version of solving the problem of matching ends and means. The ethicist asks this: "Does the end justify the means?" The economist tries to avoid such excursions into ethics. He asks this: "How can someone maximize his utility?" The word "utility" seems morally neutral. It is related to "utilitarian." Most economists profess a commitment to utilitarianism: the philosophy that an action is right in so far as it promotes happiness. It is not right morally. It is right technically. The economist does not seek to describe this scientifically: "doing the right thing." He says his conceptual framework can explain how and why people seek to achieve this: "doing the thing right." By "right," he means: "at the lowest expenditure of scarce resources." This is utilitarianism.

Ludwig von Mises was a utilitarian. He offered this explanation early in *Human Action*.

> In this sense we speak of the subjectivism of the general science of human action. It takes the ultimate ends chosen by acting man as data, it is entirely neutral with regard to them, and it refrains from passing any value judgments. The only standard which it applies is whether or not the means chosen are fit for the attainment of the ends aimed at. If Eudaemonism says happiness, if Utilitarianism and economics say utility, we must interpret these terms in a subjectivistic way as that which acting man aims at because it is desirable in his eyes. It is in this formalism that the progress of the modern meaning of Eudaemonism, Hedonism, and Utilitarianism consists as opposed to the older material meaning and the progress of the modern subjectivistic theory of value as opposed to the objectivistic theory of value as expounded by classical political economy. At the same time it is in this subjectivism that the objectivity of our science lies. Because it is subjectivistic and takes the value judgments of acting man as ultimate data not open to any further critical examination, it is itself above all strife of parties and factions, it is indifferent to the conflicts of all schools of dogmatism and ethical doctrines, it is free from valuations and preconceived ideas and judgments, it is universally valid and absolutely and plainly human (I:2).

The free market economist argues that individuals are self-interested. People seek to maximize their income, thereby maximizing their wealth. Their ultimate goal is consumption. Adam Smith spoke for the vast majority of economists when he wrote this: "Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer. The maxim is so perfectly self-evident, that it would be absurd to attempt to prove it" (*Wealth of Nations*, IV:VIII). Two comments are in order. First, Smith's view is anti-Christian. The Christian view of man's supreme purpose is this: "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). [North, *Matthew*, ch. 15] A person's performance is judged by God daily and will be judged finally in terms of this criterion. Second, there is an implicit ethical postulate in Smith's phrase: "the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer." This

leads to two additional questions. First, why favor either the producer or the consumer? Second, who should do the favoring?

2. Consumer Authority

The free market economist W. H. Hutt coined a phrase in the mid-1930s: "consumer sovereignty." It has been widely adopted by free market economists in the Austrian tradition. At root, it is incorrect. First, sovereignty is a legal concept. It has to do with political power. Hutt knew this. That is what his book was about: *Economists and the Public: A Study of Competition and Opinion*. But the phrase is not appropriate in economic analysis. From the standpoint of the economic theory of property rights, both the producer and the consumer own property. The civil government must not favor either party in a legal dispute over property. This is the biblical position. "Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously" (Leviticus 19:15). [North, *Leviticus*, ch. 14] To rewrite Smith's statement: "the interest of the producer ought not to be attended to, nor should promoting that of the consumer." Second, there is a legitimate case for the free market as an arrangement that leads to the economic authority of consumers. This case rests on the definition of money offered by Austrian economist Carl Menger in 1892: "money is the most marketable commodity." Mises adopted this definition in his book, *The Theory of Money and Credit* (1912).

Economists say that money is liquid. The use of the word "liquid" to describe an aspect of market exchange is another example of the importation of the terms of physics into economics. This always muddies the waters (another verbal importation from physical science), as I explain in Chapter 39. The economist defines liquidity as follows: "An asset that can be used to buy a wide range of economic resources (1) immediately (2) without having to (a) offer a discount or (b) pay money to advertise it." A liquid asset is an asset that imposes no exchange costs for the person who owns it. By convention and also by analysis, the economist defines "customer" as the party in a market exchange who owns money. Therefore, the customer possesses an advantage: a far wider range of purchasers of his asset (money) compared to the number of purchasers of the asset he is thinking about buying. *A seller is far more likely to offer a discount than a buyer is. This is the meaning of consumer authority.* The seller implicitly says to the seller: "I own what

you want to own. There are lots of sellers who want to sell to me. So, make me a good deal."

The buyer's challenge rests on this characteristic feature of the market's system of competition. *Sellers compete against sellers. Buyers compete against buyers*. Because the buyer has money, he faces a vast array of sellers who are willing to take his money. Why? Because money is the most marketable commodity. In contrast, most of the time a seller faces relatively few buyers who are willing to make an immediate purchase at the listed sales price. He is pressured by market competition to negotiate.

B. Ends and Means

1. Finitude and Scarcity

Men are finite. The world is finite. There are limits on men and nature that are imposed by the creation. God is not limited. Nevertheless, He deliberately limited Himself during the creation week. He took six days to make the universe. He did not speak the universe into existence out of nothing. He did this only on day one: "Let there be light" (Genesis 1:3b). This was an affirmation of sequence through time. Man is a temporal creature: creation and sequential development. The universe is also temporal: creation and sequential development.

Scarcity is a given condition. Men before the fall could not get all they wanted at zero price. Developing the environment would take knowledge, time, raw materials, and capital. Furthermore, there would be varying rates of economic return. Different people have different skills. Capital would accumulate faster in one family than another. There would be competition. All of this pointed to this inescapable concept: *economizing*. To attain a higher return on investment, investors would have had to save and invest more wisely than the competition. Competition is a universal aspect of the fulfilment of the dominion covenant, pre-fall and post-fall. What is competition? It is this offer: "I will give you a better deal. Buy from me, not from someone else."

The buyer may not choose an increase in consumption. The richer that someone is, the less likely that he will allocate most of his income to consumption. There is a trade-off between time and money. The very rich person does not have enough lifetime remaining to consume more than a small fraction of his wealth. So, he must decide who will inherit what: the state

(taxes), his children, and his favorite causes. He must choose. He must make estimates about the future uses of his wealth. What is the best use? His answer will depend on his long-term goals. But this is certain: he will not consume more than a fraction of his wealth.

So, the more economically successful he is, the more he will resemble Abraham. He will not decide what to buy and what to pay in terms of the free market principle of monetary price competition. He will try to match his highest goals to his capital. He will attempt to link his ends and his means. In the inescapable trade-off between time and money, he will favor the careful allocation of his time. This outlook is biblical. "Look carefully how you live—not as unwise but as wise. Redeem [buy back] the time because the days are evil. Therefore, do not be foolish, but understand what the will of the Lord is" (Ephesians 5:15–17).

He has priorities. These are subject to change. His external conditions change. His subjective tastes change. In order to maximize his rate of return on both time and money, he must match his subjective tastes to his external conditions. He must budget because he cannot attain all of his goals by means of his existing supply of money, knowledge, and time.

2. Behavioral Economics

The academic subdivision of economics known as behavioral economics, which is heavily based on psychology, has developed a theory of *framing*. Marketers knew about many of these laboratory discoveries long before psychologists and economists began collaborating. How the seller frames the choices can affect the choices. Here is an example from real estate marketing. A landlord charges a lower monthly rent than his competitor. He tells a prospective renter that he will charge the renter a *penalty* of X amount of money for paying the monthly rent later than day one of each month. This creates resentment in the mind of the renter. "Who does he think he is? What kind of person does he think I am?" If he pays late, he blames the landlord for charging a penalty. "It's not fair. Accidents happen." He has an unfavorable view of the arrangement. A competing landlord frames the arrangement this way. He tells this to a prospective renter: "I will give you a *discount* of X amount of money if you make payment early: before day two of the month." The renter thinks: "This is the kind of deal I like. I always pay on time. I can get a discount." If he pays late, he blames himself for having missed the discount. "It's fair. Nobody gets rewarded in life for being late."

He has a favorable view of the arrangement. Yet the amount of either the penalty or the discount is the same in both offers. The logic is the same: pay on time or else suffer the consequences. What is different is the framing. Conclusion: *the assumption that people are rational and logical when making economic choices is sometimes insufficient to explain their behavior.*

Economic theory should also take seriously the issue of changing tastes. Tastes are important aspects of economizing. Economic theory should explain them. But mainstream economists have a major theoretical problem with changing tastes. *There is no economic theory that accounts for changing tastes*. Such changes do not fit into a logic-based model of economic causation. They surely do not fit into a mathematical model. These changes are unpredictable anomalies from the point of view of economic theory. They are deviations from rationality. They do not fit into a logic-based explanation of universal decision-making. We are back to Kant's nature/freedom dualism (science/personality dualism).

Priorities are subject to change and also to manipulation, such as framing. The economic theory taught in textbooks screens out such changes in advance by insisting on a qualification: *ceteris paribus.* This means "other things remaining constant." Economists insist that their theories apply to the ever-changing real world. Supposedly, their theories make people's behavior more predictable. But the qualification of "other things remaining constant" can undermine this goal. How? By undermining the central premise of economic theory regarding human behavior: economic self-interest. Remove or qualify the idea of economic self-interest, and the science of economics becomes more like psychology (individual behavior) or sociology (group behavior).

Here is the epistemological problem. It goes back to the conflict between Parmenides and Heraclitus. Parmenides defended logic. Logic is timeless. It is not "true today, false tomorrow." When an economist asserts "other things remaining constant," he is listening to the voice of his inner Parmenides. He wants to impose the logic of timelessness onto the realm of change. He wants to trace a single cause to its many effects. He wants to make economic predictions more accurate. Most of all, He wants coherence unifying "if . . . then." Here is the problem. Things do change. First, do important things change? How can theory deal with important vs. less important or even unimportant changes? Second, how can the economist be sure how long other things will remain constant? To answer this, there would

have to be a formula or at least a plausible argument to identify the time limit that is relevant in each case. No formula exists to get the timeless logic of Parmenides to interact coherently and therefore predictably with the change of Heraclitus. It is guesswork. In the language of economic theory, it is *intuition*. Intuition cannot be defined. This is what makes it intuitive. It is a subjective judgment. I discuss this in detail in Appendix A.

Consider personal self-interest. It takes subjective judgment to assess the limits of economic self-interest in a specific case or types of cases. Economists must apply economic theory to history. There is no formula that enables an economist to do this. This required judgment used to be called *casuistry*: applying fixed ethical principles to changing conditions and specific historical cases. If an economist deals with changing conditions by defining away change, he risks making his theory irrelevant for analyzing specific cases or types of cases. He dismisses change for the sake of logic or mathematical precision. He makes economic theory increasingly abstract and therefore increasingly useless in explaining why people act in predictable ways. He makes economic theory increasingly irrelevant—all for the sake of logical rigor and precision. This process of abstraction produces this result: "He has sharpened his intellectual tools so precisely that they are useful only for splitting academic hairs."

3. Conserving Resources

A major goal of most people is to conserve resources most of the time. Nevertheless, there are times of celebration. God mandated such times of celebration for the Israelites. They were required to use money generated from the sale of the tithes on their crops to journey to a central city of worship. "There you will spend the money for whatever you desire: for oxen, or for sheep, or for wine, or for strong drink, or for whatever you desire; you will eat there before the Lord your God, and you will rejoice, you and your household" (Deuteronomy 14:26). To hold back was a sin. Why? Because men are not to place their hopes exclusively in their own wealth. Consuming resources in a central city was to be a public testimony of their faith in this principle of action: "There's more where that came from."

Then why conserve resources? Because of the dominion covenant. Men must forego consumption (save) in order to build capital. Capital is a tool of dominion. God commanded Adam and Eve to subdue the earth. This covenant was not rescinded by God after the fall of man. It remains in force.

Conventional economic theory explains the desire to conserve resources in terms of the desire to consume ever-greater resources in the future. This was Adam Smith's view. But this explanation does not apply well to rich people. They are rich because they saved diligently and invested wisely. Over time, they become ever-less dependent on the personal motivation of greater future consumption as a technique to persuade them to stick with their savings plan. They have other motivations for their high rates of saving. They may want to build a business empire. Or they may want to accumulate wealth for future charitable giving. But they do not save primarily as a way to consume more goods in the future.

4. Marginal Utility

People seek lower prices, other things remaining constant. They seek better deals, other things remaining constant. They do not self-consciously waste resources. This is good economic theory. It is also effective economic practice. In the United States, the triumph of the Sears' mail order catalogue after 1883, the triumph of Ford's Model T car after 1908, the triumph of Walmart retail stores after 1962, and the triumph of Amazon's online buying after 1995 are examples of successful marketing based on price competition. If we think of a product as a bundle of services, we can understand this. People do not want to pay more for a bundle of services than the competition's prices. They can buy a second bundle of services if they save money on the first bundle.

The theory of marginal utility was discovered by three economists in the 1870s: Carl Menger, Léon Walras, and William Stanley Jevons. This was a major breakthrough in economic theory. It rapidly replaced the labor theory of value and the cost-of-production theory of value. It described the way that a person selects what to purchase with his money. He has a list of priorities. He allocates his money in terms of this list: first, second, third. He uses his money to satisfy his highest priority before he allocates some of his remaining money to satisfy his second priority. He continues to spend money until he has allocated all of it to satisfy his highest priorities. He sees no way to re-allocate his objective supply of money and goods so that he will be able to attain a higher subjective rate of return from his property. This is the basis of the economic concept of marginal utility. People satisfy their top subjective desire first. Their second subjective desire is less intense. The more money that they receive in income, the lower that

each monetary unit's subjective value is to them, other things (especially tastes) remaining constant. But tastes do change. Income keeps coming. So, people are constantly re-allocating their wealth *at the margin*. They do this in order to increase their total subjective utility from their property. They increase their total utility by increasing their subjective utility *at the margin*. They think: "If I make this minor change, I will be better off overall."

Marginal utility theory applies to individual decision-making. In the way that economists frame the question of marginal utility, it takes place in a timeless setting. When economists discuss declining marginal utility, they do so in the abstract. *The abstract is separated from history*. This is unrealistic. The theory can be applied effectively in explaining how people re-allocate their wealth, especially as their wealth increases. But, ultimately, it suffers in practice from its abstraction: separation from history.

Here is an example. As people get wealthier, we would assume that they become more charitable. They have satisfied their basic wants, and now they have additional money. They are less at risk for economic setbacks. But this is not what we find. Rich people give away a decreasing percentage of their income during their lifetimes. Because this book is a treatise, I do not like to include geographically dependent and time-dependent statistics. But the following statistics do illustrate my assertion. In 2014 in the United States, median family income was about $54,000 per year. Families with an income below $25,000 donated over 12% of their income to charity. Families whose income was from $25,000–$50,000 donated about 7% of their income. The percentages continued to fall as incomes rose. The lowest percentage was from families with incomes of $200,000–$500,000. Their percentage was 2.6%. The percentages rose above this. In the highest income bracket listed, over $2 million a year, the percentage was 5.6%.[1] This was less than half the percentage that poor families donated. As Americans get richer, their tastes change. Their values change. They become more acquisitive, more mammon-driven. Conclusion: marginal utility analysis is almost useless in explaining charitable giving in the United States. The poor sacrifice at far higher rates, when presumably they can least afford to. The statistics indicates that wealth is addictive. "The more you own, the more intensely you want to own more."

1. Matthew Frankel, "The Average American's Charitable Donations: How Do You Compare?" *The Motley Fool* (November 27, 2016). (http://bit.ly/Donations2014)

It takes a self-conscious effort to avoid this addiction. This helps us to understand Jesus' parable of the man who wanted to build more barns to store his crops (Luke 12:16–21). [North, *Luke*, ch. 25]

Marginal utility analysis does not apply well, if at all, to addictions. A person knows that consuming ever-greater quantities of an addictive substance will shorten his life. It will surely reduce his wealth. Overall, he will be worse off. Rationally, he knows this, but he still chooses to indulge his addiction *at the margin*. He tells himself: "I can quit at any time." He constantly chooses not to quit. With addiction, an increase in subjective utility at the margin is a threat to the objective basis of total subjective utility. Dead people lose total utility. If he does not stop, he may die. He knows this rationally, but he does not stop. *He makes choices at the margin that reduce his power of choice in the future*. He steadily loses his ability to stop. A discontinuous event, which is not predictable, may enable him to stop. Members of Alcoholics Anonymous call such an event "hitting rock bottom." It is not a universal phenomenon. It is not predictable in specific alcoholics' lives. But it happens.

Any economic textbook or treatise that does not incorporate addictive behavior into its theory of human action is incomplete. The economic behavior of an addict is different from that of a non-addict. His behavior is more predictable as his power of choice decreases. He has little ability to allocate his money to anything else. It is easier for an economist to explain an addict's behavior than a normal person's behavior. An addict spends an increasing percentage of his budget on his addiction. *The marginal utility of addictive short-term consumption increases*. Each expenditure on the addictive substance has the effect of increasing future demand for that substance. There is no declining marginal utility from each expenditure. There is increasing marginal utility. Each additional unit of consumption restructures the addict's priorities. His subjective utility derived from other goods and services declines. This condition is a curse. Economists should label it as a curse. But that would point to a logical conclusion: *economic theory is not value-free*. Economists prefer to avoid drawing this conclusion at the margin. To do so would reduce their total subjective utility. They understand this axiom of human action: "You can't change just one thing." This axiom has a corollary: "You can't change your mind about just one thing." They also understand the law of unintended consequences. They act as though they believe that it is in their personal self-interest not to revise

marginal utility theory to accommodate addiction. Perhaps they fear that such revising could become addictive.

Conclusion

People prefer more at the same price. Owning more increases their range of opportunities. This is a good definition of increasing wealth: "more opportunities at the same price." If they save money on purchasing an item they want to own, they will have money left over to buy something else. This is a universally acknowledged advantage. If they want to give away whatever money is left over, they can do this.

More wealth imparts greater responsibility. This is inescapable in God's covenantal world. Owners allocate wealth. The decision to spend money is a decision to spend God's money. Men are God's economic stewards. He holds them accountable, as we learn in the parable of the talents (Matthew 25:14–30). [North, *Matthew*, ch. 47] *The dominion covenant was designed to persuade people to take on greater responsibility.* This is what dominion requires. People have what could be called a default setting to take on greater responsibility. The two main incentives are the desire for wealth and the desire for sex. The private property system is the God-designed institutional arrangement for people to pursue wealth. The family is the God-designed institutional arrangement for people to pursue sex. Both institutional arrangements benefit productive individuals. Both institutional arrangements benefit society. There is a God-designed correlation between the pursuit of individual self-interest and service to society.

The customer's desire to get a lower price from the seller is as universal as the sexual impulse. So is the seller's desire to get a higher price from the customer. Customers compete against customers. Sellers compete against sellers. Out of this competition comes an increasing quantity of goods and services. This is an aspect of the extension of the dominion covenant. Some people pursue the kingdom of God. Others pursue the kingdom of mammon. They have this in common: the desire for a better deal. To get this, they need money. So, they economize.

19

PROTECTIONISM

Hiram sent word to Solomon, saying, "I have heard the message that you have sent to me. I will provide all the wood of cedar and cypress that you desire. My servants will bring the trees down from Lebanon to the sea, and I will make them into rafts to go by sea to the place that you direct me. I will have them broken up there, and you will take them away. You will do what I desire by giving food for my household." So Hiram gave Solomon all the timber of cedar and fir that he desired. Solomon gave Hiram twenty thousand measures of wheat for food to his household and twenty measures of pure oil. Solomon gave this to Hiram year by year. The Lord gave Solomon wisdom, as he promised him. There was peace between Hiram and Solomon, and the two of them made a covenant (I Kings 5:8–12).

Analysis

Solomon began to build God's temple. He wanted the craftsmanship to be superior. He could not locate such craftsmen inside the geographical boundaries of the nation of Israel. So, he approached Hiram, the king of Lebanon. He made Hiram an offer: "Now therefore command that they cut cedars from Lebanon for me. My servants will join your servants, and I will pay you for your servants so that you are paid fairly for everything you agreed to do. For you know there is no one among us who knows how to cut timber like the Sidonians" (I Kings 5:6). The two kings entered into a mutually agreeable voluntary exchange. "So Solomon's builders and Hiram's builders and the Gebalites did the cutting and prepared the timber and the stones to build the temple" (v. 18).

In order to maximize the benefits to the respective nations, which meant the benefits to the people of the respective nations, the two kings exchanged assets. The king of Lebanon provided skilled craftsmen and timber, and King Solomon provided the king of Lebanon with large quantities of food. Each king did so as a representative agent of his people.

Each of the kings understood that he could achieve his goals on behalf of his people by cooperating with the other. Each of them had different goals. In order to attain these goals, each of them needed the cooperation of the other. This is because each of them needed the cooperation of the workmen and the products of the land of each nation. Solomon could not build a temple with the timbers and craftsmen of Israel as he could with the timbers and craftsmen of Lebanon. Lebanon had a great reputation for timber. We still have this phrase in English: the cedars of Lebanon. Lebanon's reputation has carried down through time for 3,000 years.

In order to attain his goals for God's temple and also for the people of Israel, Solomon knew that he would have to gain the cooperation of a pagan king. That king's theology was irrelevant to the question of the legitimacy of Lebanon's cooperation in the construction of the temple. So was the theology of the workers who would be supplied by the king. Solomon sent 10,000 men to work in Lebanon every third month (v. 14). The fact that foreigners supplied both the craftsmanship services and the wood had no bearing whatsoever on its lawfulness in the construction of the temple. The wood was in no way tainted by the fact that it had been produced in a foreign land and crafted by people holding a different faith. The fact that Solomon purchased the timber and the craftsmen legitimized the use of Lebanon's timber and craftsmanship.

There was no restraint of trade theologically. There was no restraint of trade liturgically. The theological confession and future ritual participation in Israel were in no way compromised by the fact that foreigners had been vital in the construction of Israel's central manifestation of the presence of God in the land. "The word of the Lord came to Solomon, saying, 'Concerning this temple which you are building, if you walk in my statutes and do justice, keep all my commandments and walk in them, then I will confirm my promise with you that I had made to David your father. I will live among the people of Israel and will not forsake them'" (I Kings 6:11–13).

There were no judicial barriers to trade. There were no import quotas established by either king to restrain the quantity of goods and labor services imported from other side of the border. There were no tariffs, meaning sales taxes, on imported goods. There was open trade, meaning open exchange. Each king recognized that he would be better off, and his people would be better off, if there were no restraints on trade. Each king recognized that he could achieve his goals less expensively by refusing to estab-

lish any restraints on exchange.

There was specialization in the construction of the temple. The craftsmen of Lebanon were legendary for their skills. These skills were not available from craftsmen in any other nearby nation. The quality of the wood was not available from any other nearby nation. It was clear to Solomon that the aesthetic value of the temple as a place of worship would be increased by means of imported goods and services.

Here we see the principles of free trade in action. One of these principles is the specialization of production. Specialists can produce higher quality goods and services than can be attained at the same price when produced by nonspecialists. The Lebanese timber workers were specialists. On the other hand, the king of Lebanon saw that it would be wiser to import food from Israel than to attempt to produce the same quantity of food inside the borders of Lebanon. It was to his benefit, and to his people's benefit, that the Israelites exported food. The Israelites were producing food on behalf of the Lebanese. The Lebanese were producing crafted timbers on behalf of the God of Israel and the people of Israel. The Lebanese workers probably did not care whether or not God would benefit from their craftsmanship, but they knew they would be fed well. They may not have cared one way or the other about the satisfaction of the Israelites with the quality of the temple, but they cared about their own empty bellies.

The servants of the king of Lebanon served the God of Israel and the people of Israel. The people of Israel did not serve the gods of Lebanon. But they did serve the people of Lebanon. The reason why the people of Israel were not serving the gods of Lebanon was this: God is the God of the whole world. He is sovereign. He is the owner of all the world. When a God-fearing person acts on behalf of a customer by providing high-quality goods and services, he is serving the sovereign God who owns the world. He is not serving whatever deity is worshiped, or not worshiped, by his customer. This is the nature of the covenant that God established with Adam in the garden (Genesis 2). It was actually established before Adam's creation (Genesis 1:26–28). By serving someone else's economic goals, a covenant-keeper is in no way responsible for the customer's covenant with his own god. Put differently, the customer's confession of faith is not a covenantal issue with respect to the legitimacy of trade. This is why covenant keepers are encouraged to establish exchange relationships with covenant-breakers. The God of the Bible is sovereign, not the gods of the various covenant breakers.

When covenant-keepers establish mutually beneficial trade relationships with covenant-breakers, this might seem to extend the kingdom of the covenant-breakers alongside the extension of the kingdom of God. But this is not the case. This is because God is sovereign; all other supposed gods are not. The wealth of the sinner is laid up for the just. We learn this from Solomon (Proverbs 13:22). So, when a covenant-keeper enters into an exchange relationship with a covenant-breaker, thereby enabling the covenant-breaker to achieve his goals less expensively, he is increasing the future inheritance of covenant-keepers in history.

This is why the Bible does not authorize restraints of foreign trade imposed by civil governments. *Such restraints restrain the construction of the kingdom of God in history.* The construction of the temple is the archetype of this principle of trade. This is not an argument against tariffs when they are used exclusively for raising revenue. Every tax is a restraint of trade. But it is an argument against all forms of import restrictions that are not exclusively revenue devices.

Had there been restraints of trade between Lebanon and Israel, this would have reduced the productivity of workers on both sides of the border. The workers on both sides of the border would have been poorer. Their income would have been lower. This is because they would have been less productive. To maximize their production, they needed to specialize. But the biggest loser in the arrangement would have been God. He wanted a temple. He wanted a high-quality temple. The only way for God to get what He wanted was through the skills that He had imparted to covenant-breakers in Lebanon. Free trade enabled Him to get what He wanted.

Once we understand this argument, then we should be able to understand why restraints on trade across national borders make people on both sides of the border poorer than they would otherwise have been. In short, *protectionism reduces wealth.* It makes people poorer than they otherwise would have been. We know this because free trade makes people richer than they otherwise would have been.

A. Winners Without Losers

In the case of the king of Lebanon and King Solomon, each of them had individual goals. Each of them was a judicial representative of his respective populations Each of them had lawful authority. Each of them imputed value to his own goals. But each of them also did so as a representative agent. So,

there was an individualism that underlies the exchange between the two kings, but there was also a corporate element. Each of them did this on behalf of his respective nation. That is to say, each of them did it with respect to the people in his nation.

If the exchanges had been made by private citizens on both sides of the border, this would not have made a difference in the economic logic of the exchanges. In each case, the citizens would be better off as a result of the exchanges, or at least they believed they would be better off before they entered into the exchanges. Otherwise, they would not have entered into the exchanges. We know from the logic of the case of Solomon and Hiram that the people in both nations were also better off as a result of the exchanges between the two kings. In short, *free trade benefits the one and the many*. Free trade benefits the corporate entity that we call the nation, and it also benefits the individuals who are covenantally part of the nation.

The false logic of protectionism denies the accuracy of this analysis. Those who favor restraints of trade imposed by the national civil government argue that the nation (one) and also the people residing in the nation (many) will be better off after import quotas or import taxes are imposed. They rarely mention what will happen to people on the other side of the border. But, if pressed to answer, they argue that people on the other side of the border will be harmed economically. In other words, restraints on trade benefit only people residing in the protectionist nation. They will be better off *at the expense of* those on the other side of the border.

This logic is opposed to the logic of exchange. The logic of exchange tells us that both parties in the exchange are better off after the exchange. It does not matter that there is an invisible judicial line called a national border separating the two people who make the exchange. The free market economist argues that exchange leads to net benefits for both of the parties involved in the exchange. In short, the benefit of one of the parties does not come at the expense of the other. They both benefit.

It is an ancient fallacy that the profit of one of the parties comes at the expense of the losses sustained by the other. This argument goes back to a French essayist in the late 1500s, Michel de Montaigne. His essay's title conveys his argument: "The Profit of One Man Is the Loss of Another." Ludwig von Mises called this the Montaigne fallacy. What Montaigne described is accurate with respect to a rules-structured game in which betting is involved. The winner in such a game is the beneficiary at the expense of the

loser. The game does not create wealth. It merely redistributes wealth that players bring with them into the game. Each player expects to win at the expense of the losers. This is not true of participants in the market process. This is why the mathematical analysis of games does not apply to the free market. This is because there are no "rules of the game" in the market's competitive pricing of assets. Market pricing is a system in which entrepreneurs deal with economic uncertainty. There are no known mathematical patterns. In contrast, games are governed exclusively by risk, which is governed by mathematical patterns. Uncertainty is different from risk. This was first explored in depth by a young economist, Frank H. Knight, in *Risk, Uncertainty, and Profit* (1921). Mises agreed with Knight on this point, as he wrote in *Human Action* (XV:8, note 18) So does Mises' disciple, Israel Kirzner.

People bring valuable knowledge and property into the free market social order. They seek to better their conditions through voluntary exchange. They exchange knowledge or property in the broadest sense—ownership claims—for what they regard as more valuable knowledge or property. This creates wealth when both parties forecast their personal outcomes correctly. Both parties win. This is how individual wealth increases. It is therefore how social wealth increases.

It is worth noting that Montaigne's analysis also applies to the competition between God and Satan for covenantal allegiance of people. A person is either a covenant-keeper or a covenant-breaker. Whenever someone is converted to saving faith in the God of the Bible, the kingdom of Satan suffers a loss. But there is no exchange relationship between God and Satan. Rather, this a battlefield of souls. This competition is not part of the market process.

B. Borders and Trade

Protectionism launches a debate about restricting trade across national borders. It is never a debate about restricting trade across state, county, town, and city borders.

1. A Single Logic

This raises a question: why is the logic presented by defenders of protectionist sales taxes and quotas not equally valid to regional borders inside a protectionist nation? If economic logic is universal, then it has to apply on both sides of every border. Protectionists admit this with respect to borders inside the nation. They reject it with respect to their nation's border.

I have never heard anybody argue that there should be a sales tax imposed on goods imported from across the street, across town, across the county, or across a state border. Such a suggestion would not be taken seriously by economists, and it is unlikely that it would be taken seriously by legislators. But, with respect to a national border, tariffs and quotas are almost universally imposed. Tariffs are sales taxes on goods imported from outside a nation. A quota is a restriction on the number of imported goods allowed per year. A national government collects no taxes from a quota, and it must spend tax money to enforce it. These import restrictions are imposed at the border by customs agents. These restrictions have proven to be cost-prohibitive to enforce when goods are delivered by air carrier. They are impossible to enforce with respect to information sold on the World Wide Web. An increasing percentage of international commerce is delivered digitally across borders. So, tariffs applied to a relatively small percentage of international commerce. In the United States as of 2020, it is about 1% of total revenue is generated. Around the world, it is something in the range of 3.5%. The amount of money collected from tariffs is so minuscule that they are not taken seriously as revenue sources. Therefore, they exist only because of special-interest political pressure groups that want protection from imported goods that are sold less expensively than domestically produced goods. *The economic function of tariffs has to do with protection, not revenue*.

The logic of tariffs is worth considering, but not because tariffs have much effect in international commerce. It is worth considering because the fallacies of trade restrictions have been widely believed for half a millennium. The most famous defenders of tariffs are collectively known as mercantilists. They were dominant in England from the late 1600s until the publication of Adam Smith's refutation of mercantilism, *Wealth of Nations*, in 1776. The debates continue to go on, but they are almost always debates between academically trained economists, who are almost universally defenders of free trade, and representatives of specific special-interest groups that seek to persuade politicians to enact tariffs in restraint of trade. Sometimes one of these groups will hire a trained economist, but these economists take a stand in opposition to what they were taught at the university. They are economists for hire. They and their arguments are not taken seriously by the vast majority of academic economists. This is because their arguments are logically faulty. They involve the fallacy of applying rival ar-

guments of what will happen on both sides of the border. Mises called this error polylogism: multiple logics.

2. Smith, Jones, Green, and Brown

It is best to begin economic analysis with a discussion of the decision-making process of individuals. It is much easier to understand arguments that begin with individuals. We understand our own decision-making process.

Let us say that Smith is a buyer of some good. Jones is a seller of that good. They both live on the same side of the street. Smith traditionally buys the item from Jones when he runs out of the item.

Green moves in across the street. It turns out that he sells an item similar to the item sold by Jones. He sells the item at 20% less than Jones does. He is nevertheless able to make a profit.

Smith decides that he wants to buy the item from Green. This is no surprise.

This upsets Jones. He has suffered a decline in income. He tries to persuade Smith that Smith should buy the item from him. But Smith prefers a lower price. So, Jones makes an emotional appeal. Smith should not be buying the item from Green because green lives on the other side of the street. Jones says that people on the side of the street where he and Smith live should stick together. They should only buy from each other. He defends this in the name of an economic philosophy: "this side-ism." Smith is not impressed. He doesn't care which side of the street the seller lives on. He cares about the price.

Jones then goes to Brown, who also lives on his side of the street. He says that Brown should join him in a crusade to save the way of life on this side of the street. To achieve this, the town council must impose a sales tax on anything produced on the other side of the street. This will protect producers on this side of the street.

Brown is not skilled at understanding economic cause-and-effect. He also does not understand the judicial principle of the rule of law: the same law should apply to everyone. So, he and Jones go to the local town council to persuade its members to impose a tariff on goods produced on the other side of the street. Jones does the arguing. He says that the community will be benefited on the basis of this side-ism.

I ask: should the town council agree to pass such a law? Is it economi-

cally logical? Is it judicially logical? Is it morally valid? No. Also, it would create a nightmare of enforcement problems: imposing tariffs down the middle of every street in town.

Now apply the same logic to the border of a city in relation to the contiguous county. County politicians will see that this is ridiculous. They will appeal this to the state supreme court or some higher jurisdiction. They court will reject the city's plan.

The result is this: Jones must learn how to compete with Green. If he fails to do so, he will go out of business. Eventually, Brown will probably see that it is better for him also to buy from Green. The result is what we call free trade.

3. Smith, Jones, Green, and Wong

I will extend the argument. A new seller appears on the scene. He sells the same item that Green sells. Jones has learned to compete, so that he can almost match the price offered by Green. The new seller is named Wong. He sells the item at 20% less than Green does, and 21% less than Jones does. He is able to do this because he has a cousin in China who has hired him as the local distributor. His cousin produces the item inexpensively. He passes on the savings to anyone who will buy from Wong.

Smith is impressed. The quality of the product is just as good. He can save 20% by purchasing it from Wong. He starts buying from Wong.

At this point, Green and Jones get together. They decide they had better get the town council to impose a tariff against the products sold by Wong. But the council is not allowed to do this by state law. The council has to apply the same sales tax on every item sold inside its jurisdiction. It is not allowed to discriminate between one seller of the item and a rival seller of the same kind of item. The state government supports this principle, and so does the national government.

So, Green and Jones get together with other sellers of the same product all over the nation. They set up an organization to promote the sale of the item by producers who are located inside the nation. Then they hire a lobbyist to go to representatives in the national legislature. The lobbyist argues that Wong should not be allowed to sell at such low prices inside the national boundaries. There needs to be a tariff placed on the importation of this particular item. The lobbyist also offers to make a substantial donation to the political action committees of key politicians in the national legisla-

ture. The politicians need this money for their next political campaign to get reelected. So, they pass a law imposing a tariff of 20% on all items imported from outside the nation.

The winners here are Green and Jones. They can keep their prices high because they no longer face competition from Wong. Let us not forget the politicians who passed the law. They receive campaign contributions from the special-interest group that wanted the tariff. They are winners.

There are also losers. In Section A, I wrote about winners. In a voluntary transaction, both the buyer and the seller are winners. Both parties are buyers and sellers. By tradition, we call the person who sells money (gives up ownership) the buyer, and we call the person who sells a product or service the seller. But, analytically speaking, they are both buyers and sellers.

With tariffs, there are always losers. This is because tariffs involve state compulsion. The state has imposed an economic penalty on anybody who imports a product. He must pay a sales tax, called a tariff. So, let us consider the losers. One loser is Smith. He will have to pay more money for the item. This means that he will lose money. He will not retain as much money after he has purchased the item. Next, let us not forget about Brown. He also will have to pay more money for the item. There is a third loser: Wong. He had a good business going, but now it is no longer competitive. He will lose money. There is a fourth loser: Wong's cousin in China. He will also lose money.

4. Different National Covenants

Jurisdictional boundaries inside a nation's borders are marked by regional and local borders. These are judicial designations. Those people living inside a specific jurisdictional boundary are also part of a national covenant. National covenants differ from each other. Citizens within a nation's boundaries are obligated to obey the laws within the national borders and also within the jurisdictional boundaries of the regional civil governments in which they reside.

An argument against free trade can be made on the basis that national legal orders are different from each other because of covenantal differences. But, in the case of trade between Solomon and Hiram, the text specifically says that the trade involved cooperation between the covenantal representatives of the two nations (I Kings 5:12). There was nothing wrong with trade between Solomon and Hiram, which meant there was nothing wrong

with trade between Israel and Lebanon. The covenantal gods were different in the two nations, but trade was valid.

A familiar case against free trade is that residents in a foreign nation provide some crucial product or service to the residents in the other nation that would be vital in a crisis, such as a pandemic or war between the two nations. The foreign government might prohibit residents from exporting.

There is also a case for export controls of weaponry to a nation that could become a military threat. Who should decide? The military. Generally, military strategists do not pressure their governments to restrict exports of most weapons. Nations rich enough to have an extensive defense industry have policies of exporting almost all types of the nation's weapons to any nation that will pay for them. Certain key weapons systems are retained as monopolies, but these constitute such a small fraction of total GDP that their value is essentially unmeasurable. These export controls have no impact on the economies of either the exporting nation or the potential importing nations. In other words, they are economically irrelevant.

Someone may argue in favor of tariffs against the import of some resource that would be important because of military considerations. This creates dependence on that foreign nation. The best response is this. The politicians should ask the strategists within each branch of the military if any item is so important that the branch of military will pay for the same items produced in the United States at higher prices. Each of the branches of the military would then pay for these purchases out of its own budget. Therefore, this branch of the military would suffer a reduction in its budget for other services within its budget. This would force the military to pay the price of maintaining any industry that the military says is crucial for fighting a future war. If something is so crucial for fighting a war that the military does not want to become dependent on from outside the nation, the military should pay for it. By forcing the various branches of the military to pay extra money for the items that they say are crucial, at the expense of the remainder of their budgets, the legislature would silence most of the requests from the military for the domestic production of their supplies.

There is always a threat that a foreign nation may specialize in the production of a crucial product line, such as medicines. In the year 2020, Chinese firms were major producers of medicines and medical equipment. A province suffered a pandemic early in the year. But Chinese manufacturers continued to export medicines and equipment to the United States and the

rest of the world. The government did not prohibit these exports. As long as peaceful relations are maintained between China and any other nation, China's government would have no cogent economic reason to stop exports. To prohibit exports would increase the cost of military hostilities between China and any nation that had become dependent on imports from China. This is another reason to favor free trade. It promotes peace. How? Because it imposes a high cost on conflict. Those individuals or nations who are fighting must then produce their own goods and services. This reduces the specialization of production, thereby raising the costs of production and reducing output per unit of resource input. This was one of the reasons why God cursed the land in Genesis 3:17. I have discussed this in Chapter 12 of my commentary on Genesis.

C. Tariffs Reduce Exports

Defenders of tariffs are either unaware of the fact that tariffs reduce exports. They simply do not understand the relationship between tariffs and exports.

Whenever an exporter in one nation sells his output to an importer in another nation, he sells for money. The money that he sells for is the monetary unit that is used in his own nation. This money is part of his nation's banking system. A farmer in the United States who sells food to an importer in China does not want to be paid with China's national currency, the yuan. He wants to be paid with United States dollars. He can spend dollars locally or on the Web. He cannot spend yuan.

In order for an importing company on the other side of a national boundary to purchase goods or services from across the border, it must have an account in a bank that is located inside the jurisdiction of the exporting nation. The importer uses money in its foreign bank account to buy the items. Its bank then transfers digital money of the exporter's nation to the account of the exporter.

How does an importer on the other side of a border set up a bank account inside the exporter's nation? He sells something of value to someone in the exporter's nation. This is another way of saying that *he buys this money*. He buys it by selling something of value. If he cannot sell something of value to someone in the exporter's nation, he must sell something of value to another foreigner who sold something of value to someone in the exporter's nation. In short, if someone living outside a foreign nation wants to

buy something from someone inside a foreign nation, he must sell something of value to someone inside that foreign nation. Put simply, *trade requires trade*. Simple, isn't it? But protectionists do not believe this.

Digital money does not cross borders. It stays inside the banks of a specific nation. What is exchanged is *ownership* of digital money. Digital money stays inside computers. Money inside a bank account is digital. It is under the control of a national central bank. Example: U.S. dollars are in banks that are under the jurisdiction of the Federal Reserve System, the central bank. Example: yuan (also called renminbi) are in Chinese banks that are under the jurisdiction of the People's Bank of China. Bank accounts denominated in yen stay inside banks that are under the authority of the Bank of Japan.

Goods cross borders. Money does not. Well, almost no money crosses borders. Physical paper bills issued by the Federal Reserve System do cross borders. Low-income day laborers from foreign nations who work for wages that are paid in paper currency inside the United States often send some of this money to relatives in their home countries, predominantly Mexico and Central American nations. United States paper dollars circulate in some Third World countries as a second currency. There are foreign markets that trade in U.S. dollars. This is true of no other currency. It has been a unique situation in the postwar world after 1945. This was not true from the 16th century until the middle of the 19th century. Spanish silver coins circulated throughout the West. Spanish silver dollars served as a major currency for colonial North America for three centuries. They were widely used in United States until 1857. This was also true of British gold sovereigns. But, with the abolition of the gold coin standard in most European nations with the outbreak of World War I in August 1914, currencies of one nation no longer served as money in other nations.

In order for most goods and services to cross borders, the ownership of digital money in banks must change on both sides of the border. (The main exception is paper currency for illegal imported addictive drugs, which are sold for paper money. The U.S. dollar is the primary currency in these markets.) Individuals and corporations own digital currencies in banks inside their own nation. If they want cooperation from anyone outside their nation, they have to provide goods and services to someone outside their nation. The same is true of everyone on the other side of the border. Economic cooperation is based on this: *a transfer of ownership of digital money*. This

means that any restriction on imports from one nation must reduce the value of exports to the exporter's nation. If someone on the other side of a national border cannot gain ownership of digital money in an exporter's nation, that person cannot purchase anything exported from the exporter's nation. This is why a tariff has the same economic function as a tax on exports. *As surely as a tax on exports reduces trade, so does a tax on imports reduce trade.*

Tariffs reduce trade because they decrease the ability of someone in an exporter's nation to gain ownership of digital money in bank accounts inside the nation whose politicians have imposed tariffs on imports. Therefore, some people on the other side of the border who would like to buy exports from the nation that has just imposed tariffs on imports are unable to do so. They would like to gain ownership of money deposited in some bank inside the nation that has just imposed tariffs, but they cannot do this. They cannot do this because they cannot sell something of value to someone who has a bank account inside the nation that imposed tariffs. Why not? Because the tariffs have increased the domestic prices of items inside the nation that imposed the tariffs. An increase in domestic prices of imported goods was why the special-interest group pressured the legislature to impose the tariffs. That is the whole point of tariffs. Tariffs are supposed to reduce trade, and they do. This means the tariffs reduce the ability of people on both sides of the national border to sell something to people on the other side. People on both sides want to own money in banks on the other side, so they can buy things. But they cannot gain access to that money by selling something of value. People on both sides are thwarted by the tariffs on one side. Exporters on both sides are thwarted. Importers on both sides are thwarted. They cannot make deals with each other because tariffs on one side reduce the number of deals on both sides.

The logic of tariffs is this: *tariffs reduce the volume of imports into a nation*. This logic is correct. *When the price of something rises, less is demanded*. This is what economic theory teaches. But the logic of tariffs works in the same way on both sides of the border. When there is less trade, people on the other side of the border cannot purchase as many goods and services from exporters on this side of the border. Therefore, the logic of economics tells us that trade will be reduced for both importers and exporters on both sides of the border. Buyers on both sides of the border who would otherwise have purchased something from someone who lives across the border will

not be able to do so. Why not? Because it now costs more than before to make exchanges on both sides of the border.

Supporters of tariffs never speak publicly about the fact that tariffs reduce income to the export sectors of the economy. A tariff benefits members of a special-interest group that seeks reduced competition from imports, but it also necessarily reduces the income of exporters. Because most people do not understand economic theory, especially politicians, they do not understand that *a tariff has the same economic effect as a tax on exports*. People who would not want to see the government impose a tax on exports nevertheless call for higher tariffs. This is because they do not understand economic theory. They do not understand that the logic of tariffs leads to an inescapable conclusion: higher tariffs on this side of a border reduce exports from this side of the border. Because would-be sellers on the other side cannot sell their goods on this side because of the tariffs, they cannot get ownership of money on this side to buy from sellers (exporters) on this side. This is the price of "this side-ism." It is bad economic theory. It therefore produces bad economic results whenever it is implemented by a national government.

Conclusion

The logic of free trade is this: *voluntary exchange increases producers' output*. It does so because each producer can specialize in whatever he does most efficiently. His output increases, so his wealth increases. By furthering specialization of production, voluntary exchange leads to greater personal wealth. It therefore also increases the wealth of societies that are involved in extensive voluntary exchange across national borders. We often call these societies "nations," but that is too restrictive. The concept of society includes all organizations within a particular geographical area: families, businesses, voluntary associations of all kinds, and individuals living within a geographical region. This was the argument of Adam Smith in 1776. It is surely the implication of the exchange between King Hiram and King Solomon sometime around 1012 B.C. Because this is true, it should not take much creative thought to come to the conclusion that tariffs reduce people's wealth because they reduce voluntary exchange. Tariffs reduce the specialization of labor. They reduce the output of most people in a society.

Most people do not understand the case for free trade: the case for personal liberty. No one who understands the case for free trade should pro-

mote tariffs in order to protect a special-interest group. Yet we find people who claim to be supporters of the free market who simultaneously affirm their belief that protectionism, meaning tariffs and quotas, will increase the wealth of the nation that imposes them. This means that they do not understand the case for free trade. They do not believe in voluntary exchange as a way to increase the wealth of individuals on both sides of a border. A tariff can increase the income of members of a special-interest group that has persuaded politicians to impose and then enforce tariffs. But this increased wealth of a tiny segment of the population is paid for by the reduced productivity and reduced range of choice (liberty) enjoyed by those people who are not part of the special-interest group.

People who favor protectionism do not think as economists. They do not understand economic theory. This is why free trade is a litmus test for economic theory. This is why opposition to protectionism is also a litmus test for economic theory. I hope you passed the test. If you need additional evidence, read my book, *Protectionism and Poverty* (2020).

20

SUPPLY AND DEMAND

Elisha said, "Hear the word of the Lord. This is what the Lord says: 'Tomorrow about this time a measure of fine flour will be sold for a shekel, and two measures of barley for a shekel, in the gate of Samaria." Then the captain on whose hand the king leaned answered the man of God, and said, 'See, even if the Lord should make windows in heaven, can this thing happen?' Elisha replied, 'See, you will watch it happen with your own eyes, but you will not eat any of it' (II Kings 7:1–2)

Analysis

Ben Hadad, king of Aram, had besieged Samaria in the Northern Kingdom. The city was stricken with a famine. The price of food had become too expensive for most people to buy. "So there was a great famine in Samaria. Behold, they besieged it until a donkey's head was sold for eighty pieces of silver, and the fourth part of a kab of dove's dung for five pieces of silver" (II Kings 6:25). The prophet Elisha was in the city. He made a prediction regarding the price of food the next day. There was no question in anyone's mind what this meant. The siege would be lifted. Large quantities of food would be brought into the city. Under the new conditions of supply and demand, the price of food would be reasonable. He was not simply predicting a fall in the price of food; he was predicting the defeat of the besieging army.

A military officer understood exactly what Elisha was predicting. He dismissed this prophecy as nonsense. Elisha promised him that what he had predicted would take place, and the price of food would fall, but the commander would not taste of any of it. This is exactly what transpired. During the night, the besieging army heard what appeared to be marching troops approaching. They fled in terror, leaving all of their food behind. Four lepers went out to the now-empty camp of the army. They collected some gold and silver for themselves, but then they felt guilty. They decided to tell people in the city that the food was available. People in the city went out to collect the

food and bring it back. In the rush to get the food, the mob trampled the officer. He did not have an opportunity to eat.

This passage makes it clear that the law of supply and demand was fully understood in ancient Israel. The commander could put two and two together. There was only one scenario that would make possible this rapid decline in the price of food: a lifting of the siege. There would also have to be a vast increase in the supply of food. Because there was no visible way for Israel to defeat the invading army, and because there was also no large supply of food available in the immediate vicinity, the captain dismissed the prophecy as nonsense. He paid for this arrogance with his life (II Kings 7:20). [North, *Historical Books*, ch. 26]

A. A Universally Recognized Law

I believe that the law of supply and demand is the best understood law of free market economic theory. It is understood around the world. It has been understood throughout recorded history. People understand that prices reflect the conditions of supply and demand. So, the phrase is widely recognized. It is generally accepted. When someone invokes the law of supply and demand in an argument, the listener probably goes along with it unless he has an interest in opposing open competition.

The phrase "supply and demand" applies to the market's pricing process. It is understandable if you understand an auction. Most people do not oppose the idea of an auction; therefore, most people do not resist the concept of supply and demand. This is why economists who favor the free market have successfully used the phrase for over two centuries. As we marketers like to say, it is an easy sell.

There are four assumptions that undergird this famous law: specialization, marketplace, money, and negotiation. First, *specialization*. There are sellers of scarce goods and services. These sellers have specialized in production. They have a high degree of expertise in the production and distribution of a particular item. They have invested time and money in the production of this item. They did not produce the item in order to consume it. They produced it in order to exchange it for money, which they could then use to buy something that they did not produce. This description rests on the concept of the *division of labor*. It rests on the concept of *specialization in production*. The concept of specialization says that it pays producers to specialize in those areas of the marketplace in which they have unique ad-

vantages: knowledge, geography, reputation, styling, and so forth. The individual produces the item for exchange, not for personal consumption.

Second, *marketplace*. Someone else has an item that he has produced. He also wants to improve his circumstances. He wishes to exchange his item for some other item that he desires more intensely. This is an aspect of subjective imputation of economic value. Each of the participants in an exchange imputes greater value to what the other participant owns than to what he owns. Each of them believes that he can improve his circumstances by making an exchange. To do this, they need a marketplace. It need not be physical. It can be digital. It must be paid for. There are no free lunches. The marketplace must be reliable. Contracts must be honored by participants and by outsiders.

Third, *money*. Most people understand that the law of supply and demand is most visible in today's markets. These markets are based on exchanges for money. In this situation, the person who owns money is in a more competitive situation than the person who is selling a specialized good or service. Money is the most marketable commodity. Sellers want money. They are willing to offer whatever they have for sale in exchange for a certain amount of money. It does not take sales ability for a buyer to persuade a seller to provide what he wants if the buyer is willing to pay the seller's price. This is why buyers, who are sellers of money, possess consumer's authority. They possess greater authority in the marketplace than the seller does under most conditions.

This is not generally understood by the public. The public generally assumes that the seller is in a stronger position. Most people think this: "The seller sets prices." The seller does not set prices. He *announces* prices. If no one buys whatever he is selling at the prices he has announced, then he has to lower the prices or in some way alter his marketing plan. Buyers confirm prices or fail to confirm prices by either buying or refusing to buy. Buyers can do almost anything with the money they are willing to spend. They have lots of alternatives. In contrast, sellers can do almost nothing with their inventory of whatever they have to sell if buyers are unwilling to pay.

Fourth, *negotiation*. The implicit assumption is that buyers and sellers are in a position to negotiate. The seller wants more money. The buyer wants to pay less money or receive better value for the money he spends. There is ignorance on the part of both buyer and seller. Therefore, there is an opportunity for negotiation. The book of Proverbs describes this process: "'Bad!

Bad!' says the buyer, but when he goes away he boasts" (20:14). [North, *Proverbs*, ch. 59] In a highly competitive market where there are lots of buyers and sellers, negotiation is less likely. Prices are publicly available. Buyers know what sellers are willing to sell for. Sellers know what recent buyers have been willing to pay. *The more widespread the information regarding prices, the less likely there will be negotiation*. Negotiation is the market process that prevails when there is reduced knowledge of prices.

People understand that if the supply of an item unexpectedly goes up, existing sellers will not be able to sell all of the items they have brought to market. They may have to take some items back home. More likely, they will have to lower their prices in order to reduce their inventory to zero. People also understand that if the demand for an item unexpectedly goes up, existing buyers will not be able to buy all of the items they had wanted to buy when they brought their money to market. They may not be able to take home the items they wanted to buy. Or they may have to pay more money to buy the items. Here is the law of the auction: "high bid wins." If there are a lot of auctioneers selling similar items, the bids will be lower. If there are a lot of buyers wanting to buy the items, bids will be higher. Most people understand this. Most people accept this. This is the law of supply and demand in an imaginative setting that most people can understand.

B. Forecasting

It is not true that supply creates its own demand. It is also not true that demand creates its own supply. Here is what is true: buyers make forecasts about what they will be willing to pay for an item in the future. Sellers make forecasts about what they will be willing and able to charge for an item in the future. If members of either group make mistakes, they will have to adjust their behavior when the day of market exchange arrives. Production is future-oriented. So are plans for future consumption. Nobody is certain what others will be willing to pay in the future. It takes successful entrepreneurship, meaning accurrate forecasting and planning, for a seller to make a profit. It takes successful entrepreneurship, meaning accurate forecasting and planning, for a buyer to get the best possible deal for his money: "consumer surplus."

Free market economists have traditionally argued that the market will clear itself of excess supply . . . at some price. Their assumption is this: sellers will adjust their prices in order to gain at least some money from buyers

who refuse to pay the asking prices of the goods and services that sellers brought to market. Here is the secondary assumption: *something is better than nothing*. Sellers would rather receive some money than no money. Some of them would rather sell at a price that they would have regarded as a loss when they first brought the goods to market. The new conditions have redefined what constitutes a profit and a loss. Under the old conditions, selling their inventory below the cost of production would have been understood as a loss. That is no longer the case under the new conditions. Under the new conditions, getting some money is better than getting no money, and then being forced to carry home the unsold inventory.

The same attitude governs buyers. If conditions have changed, and prices have risen above what buyers had expected to pay, some of them will pay a higher price. They would have regarded this as a loss under the previous conditions. But, under the new conditions, paying more money and taking home the product seems to be the best decision available to them.

The determining factor is price. It is the determining factor for sellers, and it is the determining factor for buyers. I am not speaking of all sellers and all buyers. I am speaking of what market economists call marginal sellers and marginal buyers. These are the buyers and sellers who are willing to make a transaction at a price different from what they had expected. These are the sellers who sell at prices lower than they had expected to receive. These are the buyers who purchase at prices higher than they had expected to pay. *Their transaction prices set the prices for comparable transactions*. The prices paid by marginal buyers and sellers are regarded as the best available prices in the market, and other buyers and sellers will imitate the selling prices of the marginal buyers and sellers. The transaction prices of the marginal buyers and sellers send signals to all other buyers and sellers in the marketplace who are aware of the transaction prices of the marginal buyers and sellers. Sellers do not want to accept less, and buyers do not want to pay more.

C. Keynes vs. Say's (Supposed) Law

The great transformation in economic theory began in 1936 with the publication of John Maynard Keynes' book, *The General Theory of Employment, Interest, and Money*. The world had been in a depression for about six years. While Austrian economists had an answer for this, as seen in the book by Mises' disciple Lionel Robbins, *The Great Depression* (1934), the

vast majority of free market economists seemed unable to explain why the depression did not end. This made free market economists vulnerable to the accusation that their theories no longer worked. (Robbins decades later disavowed the book.)

There were valid reasons for the economic stagnation that these economists ignored. Governments had indulged in huge deficit spending campaigns as a way to put people back to work. Every government had gone off the gold standard by 1934. Monetary policy of central banks was no longer predictable. Businessmen were wary for good reason regarding the next piece of legislation. Germany and Italy had adopted central economic planning in the form of fascism. Property rights were no longer respected by these major governments. In the United States, the national government interfered in the economy as never before in peace time. Free market theory says that prices should have adjusted to clear the market of unsold goods. But governments had passed legislation that made it difficult for retailers to sell their goods at a market price and also hire laborers at a market wage. The depression dragged on.

It was then that Keynes offered a criticism of the traditional free market approach regarding supply and demand. His target was a French economist of the early nineteenth century, J. B. Say. Either Keynes had no understanding of what Say had written, or else he was deliberately deceiving his readers. He devoted only three sentences to Say's writings. Here is what he wrote. "From the time of Say and Ricardo the classical economists have taught that supply creates its own demand—meaning by this in some significant, but not clearly defined, sense that the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product" (p. 18). "Thus Say's law, that the aggregate demand price of output as a whole is equal to its aggregate supply price for all volumes of output, is equivalent to the proposition that there is no obstacle to full employment. If, however, this is not the true law relating the aggregate demand and supply functions, there is a vitally important chapter of economic theory which remains to be written and without which all discussions concerning the volume of aggregate employment are futile" (p. 26). Keynes' phrase has been cited by Keynesian economists ever since: "supply creates its own demand." Obviously, in 1936, supply had not created its own demand. So, it looked as though Say and Ricardo were economic ignoramuses.

The problem is this: Say never said any such thing. Here is what he wrote regarding pricing. This is from his *Treatise on Political Economy* (1803). The passage is a defense of price flexibility in the marketplace. It is a defense of economic negotiation as a way to clear the market of unsold inventories. In short, it is a defense of *market-clearing prices*.

> The prospect of an abundant vintage will lower the price of all the wine on hand, even before a single pipe of the expected vintage has been brought to market; for the supply is brisker, and the sale duller, in consequence of the anticipation. The dealers are anxious to dispose of their stock in hand, in fear of the competition of the new vintage; while the consumers, on the other hand, retard their fresh purchases, in the expectation of gaining in price by the delay. A large arrival and immediate sale of foreign articles all at once, lowers their price, by the relative excess of supply above demand. On the contrary, the expectation of a bad vintage, or the loss of many cargoes on the voyage, will raise prices above the cost of production. . . .This is the meaning of the assertion, that, at a given time and place, the price of a commodity rises in proportion to the increase of the demand and the decrease of the supply, and vice versâ; or in other words, that the rise of price is in direct ratio to the demand, and inverse ratio to the supply (I:II, p. 290).

> In each country the wants of the consumer determine the quality of the product. The product most wanted is most in demand; and that which is most in demand yields the largest profit to industry, capital, and land, which are therefore employed in raising this particular product in preference; and, vice versâ, when a product becomes less in demand, there is a less profit to be got by its production; it is, therefore, no longer produced. All the stock on hand falls in price; the low price encourages the consumption, which soon absorbs the stock on hand (III:I, p. 390).

Say fully understood what Adam Smith had understood, namely, that sellers of goods that were not in high demand would then lower their prices in order to sell their inventory. These low prices would encourage consumption: "the low price encourages the consumption, which soon absorbs the

stock on hand." Say did not teach that supply creates its own demand. He taught what should have been obvious, namely, that if someone has not supplied something worth buying at the price he is asking, he will not earn any money. If he does not earn any money, he will be unable to register demand in the market place. But, at some low price, he will sell his inventory. Thus, total (aggregate) production will create demand *at some price*. So, it is quite possible for a producer to bring to market an item for which there is no demand at the price he expected to receive and is asking. In such circumstances, he must lower his price if he wishes to make any money. In other words, is a matter of supply and demand. Say even used this phrase: "the relative excess of supply above demand."

Anyone who understood the law of supply and demand in 1936 should have begun searching for causes of the inability of sellers to sell their inventories. The world economy had not adjusted to the new conditions of supply and demand. Why not? In July, 1930, the United States government hiked tariffs. Other nations retaliated. The international division of labor contracted. In May, 1931, a large Austrian bank, Credit Anstalt, declared bankruptcy. In September, 1931, England went off the gold standard. The United States followed in March, 1933. Governments ran massive deficits. Investors and businesses could no longer expect governments to cut taxes and spending. In 1963, Murray Rothbard's book was published: *America's Great Depression*. He discussed in detail the economic policies of President Hoover's administration (1929–33), policies that were greatly expanded by President Franklin Roosevelt's New Deal (1933–41). These policies restricted the ability of producers to lower their prices. They also restricted the right of employers to offer market-clearing wages to workers, thereby putting them back to work. The New Deal, beginning in 1933, launched the government-enforced trade union movement in the United States.

Keynesian economics rests on this premise: the law of supply and demand does not work predictably to solve the problems of recession and depression. Keynesian economists reject the suggestion that the law ever did work effectively. They conclude that government intervention in the form of large government deficits and central bank expansion of money are necessary to restore economic growth. They do not believe that reducing government taxation and intervention will lead to permanent economic expansion. They also believe in the welfare state.

Conclusion

In a world of scarcity, everyone would like to own more than he possesses. There are limits to his resources. Everyone faces monetary limits on his ability to bid for goods and services on a free market.

The only way for someone to register demand in the free market is through the results of his production or the production of somebody who gave him his money. This production must be marketable. If someone does not wish to buy whatever a producer has produced, the producer has wasted time, money, resources, and dreams. Just because he worked hard to produce something does not mean that buyers will be willing to pay him the money he asks in exchange for his output. He may have to ask less. Therefore, *supply and demand are not autonomous forces*. They are part of the market process.

Supply and demand are meaningful only in the context of prices. Prices must be flexible, upward and downward, in order for supplies of goods and services to find buyers. People must be allowed to negotiate with each other as a way to make exchanges. Civil law should allow owners to sell or rent their property. They should be allowed to transfer to others the responsibilities associated with owning specific goods. Other people may want the benefits and the associated responsibilities of owning these goods.

Price flexibility leads to the concept of the *market-clearing price*. This is not the same as an equilibrium price. There is no such thing as equilibrium; therefore, there is no such thing as an equilibrium price. The concept of equilibrium rests on a silly assumption: the theoretical usefulness of the concept of human omniscience. In contrast, a market-clearing price is the price at which everyone who has an item to sell can find a buyer for this item. Simultaneously, everyone who wants to buy this item can find a seller. Lots of people might like to buy it. Lots of people might like to sell theirs. But liking is not the same as doing. The key phrase is this: *at some price*. At a market-clearing price, all of those people who want to buy at a particular price make exchanges with all of those who wish to sell at that price. No one is left out in the cold with a desire either to buy or sell at that price. *The unified concept of supply and demand implicitly has as its presupposition the possibility of a market-clearing price*. Economic theory brings this to the forefront of the discussion what is usually only implicit. This price is not known in advance by either buyers or sellers. It is the product of negotiation, guesswork, and the providence of God.

Humanists prefer to substitute the word *luck* for the phrase *providence of God*. Their worldview is governed by the concept of chance, as I argued in Chapter 6 of the *Student's Edition*. Chance is point one of their covenant model: the doctrine of origins. Obviously, I reject their attempted substitution.

21

SERVICE AND COOPERATION

But Jesus called them to him and said, "You know that the rulers of the Gentiles lord it over them, and their great ones exercise authority over them. It shall not be so among you. But whoever would be great among you must be your servant, and whoever would be first among you must be your slave [servant], even as the Son of Man came not to be served but to serve, and to give his life as a ransom for many" (Matthew 20:25–28).

Analysis

In every society, there are multiple hierarchies. Without hierarchies, it would be impossible for private owners or civil magistrates to assign leadership within any institution. It would therefore be impossible to assign legal and moral responsibility to decision-makers within these institutions. According to the Bible, *the basis of all authority is God's delegation of responsibility*, meaning the legal right to make decisions, to specific people. He holds them accountable to Him. This is clear in the parable of the talents (Matthew 25:14–30). [North, *Matthew*, ch. 47] This is the second parable leading up to Jesus' description of the final judgment. (The first parable was the parable of the ten virgins.)

Every society benefits from the division of labor. This begins with the family. It extends to all other social arrangements. Here is the biblical principle that undergirds the division of labor. "Two are better than one, because they have a good reward for their toil. For if they fall, one will lift up his fellow. But woe to him who is alone when he falls and has not another to lift him up!" (Ecclesiastes 4:9–10). [North, *Ecclesiastes*, ch. 14]

Rulers exercise leadership as people who are in a chain of command. A leader has the authority to bring institutional sanctions, both positive and negative, on those people who are under his jurisdiction (juris = law; diction = spoken). He gains their cooperation in institutional ventures by means of this authority to reward and punish. This assumes that people respond pre-

dictably to incentives and disincentives. This assumption is fundamental to the science of economics. The representative biblical models are heaven and hell, which are temporary. These reflect the final sanctions: the new heaven and new earth (Revelation 21, 22) and the lake of fire (Revelation 20:14–15). These are eternal.

A civil ruler gives orders. Subordinates are supposed to respond predictably. Jesus understood this. The story of the Roman centurion with the sick servant illustrates this.

> When he had entered Capernaum, a centurion came forward to him, appealing to him, "Lord, my servant is lying paralyzed at home, suffering terribly." And he said to him, "I will come and heal him." But the centurion replied, "Lord, I am not worthy to have you come under my roof, but only say the word, and my servant will be healed. For I too am a man under authority, with soldiers under me. And I say to one, 'Go,' and he goes, and to another, 'Come,' and he comes, and to my servant, 'Do this,' and he does it." When Jesus heard this, he marveled and said to those who followed him, 'Truly, I tell you, with no one in Israel have I found such faith" (Matthew 8:5–10).

The centurion was a military commander. He exercised authority. His subordinates obeyed him. He recognized that Jesus had similar authority over nature. Jesus could heal at a distance. He had supernatural power. The centurion recognized that he was under Jesus' authority regarding the fate of his servant. He invoked the language of subordination as a way to persuade Jesus to speak a word of power on his behalf and also on his servant's behalf. This was a request, not a command. Jesus healed the servant on this basis. *This was all about hierarchy.*

The centurion wanted Jesus' cooperation. He knew that he could not gain this by speaking his own word of power. He also recognized that Jesus was unlikely to be motivated by an economic offer. He knew he could not buy Jesus' cooperation with money. So, he asked for a favor: *grace*. He admitted to Jesus that he did not deserve this favor. In this respect, he was like the Canaanite woman.

> And Jesus went away from there and withdrew to the district of

> Tyre and Sidon. And behold, a Canaanite woman from that region came out and was crying, "Have mercy on me, O Lord, Son of David; my daughter is severely oppressed by a demon." But he did not answer her a word. And his disciples came and begged him, saying, "Send her away, for she is crying out after us." He answered, "I was sent only to the lost sheep of the house of Israel." But she came and knelt before him, saying, "Lord, help me." And he answered, "It is not right to take the children's bread and throw it to the dogs." She said, "Yes, Lord, yet even the dogs eat the crumbs that fall from their masters' table." Then Jesus answered her, "O woman, great is your faith! Be it done for you as you desire." And her daughter was healed instantly (Matthew 15:21–28).

She also was pleading for an unearned gift. She verbally acknowledged her subordination to Jesus. She knew that she could not command Him. She also knew that she could not buy His healing powers. So, she begged. [North, *Matthew*, ch. 34]

This raises a practical question: "How can we gain the cooperation of others?" Jesus taught that His cooperation was not available by means of an earthly chain of command. No one could order Him around. Two gentiles recognized this: the centurion and the Canaanite woman. They both needed something that was not commercially available: supernatural healing. Neither power nor money would suffice. They became supplicants. But this strategy cannot work in the marketplace. No one without civil authority can lawfully order another person to do something for him. *This independence from coercion is a crucial aspect of political freedom.*

A. Adam Smith on Cooperation and Motivation

Smith is famous for two passages: his description of the pin makers and his explanation of the motivation for voluntary exchange. The first passage is found in Chapter 1 of *The Wealth of Nations*. Without capital and without cooperation, common pin makers would have to become highly skilled craftsmen with low individual output. People remember this example. It has proven to be unforgettable. But the more fundamental question arises: "How can the cooperation of pin-makers be secured?" They are individual producers. Smith answered this question in his other famous passage. He wrote of the need of every individual for cooperation. Read it carefully.

> In civilized society he stands at all times in need of the co-operation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. In almost every other race of animals, each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and shew them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind, proposes to do this. **Give me that which I want, and you shall have this which you want**, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity, but to their self-love, and never talk to them of our own necessities, but of their advantages. Nobody but a beggar chooses to depend chiefly upon the benevolence of his fellow-citizens. Even a beggar does not depend upon it entirely. The charity of well-disposed people, indeed, supplies him with the whole fund of his subsistence. But though this principle ultimately provides him with all the necessaries of life which he has occasion for, it neither does nor can provide him with them as he has occasion for them. The greater part of his occasional wants are supplied in the same manner as those of other people, by treaty, by barter, and by purchase. With the money which one man gives him he purchases food. The old clothes which another bestows upon him he exchanges for other clothes which suit him better, or for lodging, or for food, or for money, with which he can buy either food, clothes, or lodging, as he has occasion (I:II:2, bold face added).

Smith's central idea is this: the coordination of individual work through the market's process of voluntary exchange leads to the highest output and

therefore the greatest wealth, both individual and national. Maximized production does not come from central planning, which rests above all on incentive of fear of the civil government. Smith criticized the economics of seventeenth-century British mercantilism, which defended the use of state power to coordinate foreign trade.

What humanist economists have ignored, as have Christian defenders of state intervention in the name of biblical ethics, is this: *Smith's defense of the free market was an extension of Jesus' principle of Christian rulership through servanthood*. "But whoever would be great among you must be your servant, and whoever would be first among you must be your slave [servant]" (Matthew 20:26–27). [North, *Matthew*, ch. 41] The free market's incentives are based on mutual service, not coercion or begging. *Every form of state planning relies on the theat of coercion*. Coercion generates resistance by producers, who see a part of their output extracted by the state with nothing provided in return.

A popular defense of Christian economic ethics rests on a combination of charity and begging. This arrangement limits the scope of cooperation by limiting the motivation for cooperation. *Generosity ceases when a donor runs out of funds*. He must then replenish the funds through productivity. A system of giving to the poor and needy in this outlook is conceptually separate from the production process, unlike Smith's concept of joint production through mutual exchange. This system of exchange based on gifts is asymmetric. On the one hand, few people donate. On the other hand, the arena of people who want free money or free goods and services is huge. So, non-profit exchanges are sporadic and infrequent. In contrast, the number of exchanges between people in a profit-seeking market is beyond calculation. Exchanges are continual. People are being satisfied constantly. They have an incentive to repeat exchanges with others whose performance they trust. The free market is international and continual. It involves the vast majority of adults.

B. Self-Interest and Social Coordination

Jesus offered the solution to the problem of social coordination: the principle of service. But He did not discuss the correlation of this principle with the price system in a free market. *This correlation is the most important insight of modern economic theory*. Adam Smith deservedly gets credit for it. This was a major conceptual breakthrough, despite its simplicity. It is

not inconsistent with Jesus' teachings on service. It is an extension of this principle in the area of market exchange.

I am making what might be regarded as an outlandish statement here. I am saying that this is the key insight of free market economists. This insight is the fundamental insight that separates all rival systems of social ethics and personal ethics from the logic of economic theory. I am aware of no previous philosophical or religious system that proclaimed that the best way to achieve social coordination and thereby achieve individual goals is by means of seeking profitable exchanges.

Military brotherhoods and other secret societies are based on a strict distinction between members and nonmembers. There is always a system of hierarchical control in every brotherhood that is based on either an oath to the organization or on a concept of shared risk, especially the risk of death. Religious organizations, in contrast, rely more heavily on the doctrine of love, which implies self-sacrifice on behalf of others. This can also be present in the military hierarchy, but the focus of the military hierarchy is victory on the battlefield, not a peaceful life based on mutual service. There is always a hierarchy in the religious organizations. There have to be ways of settling disputes, which are inevitable in a sinful world. The same is true of families. Families are based on love, which implies sacrifice on the part of parents for their children. Then, when the parents are feeble, the family rests on the sacrifice of children to the parents. There is a form of exchange, but it is non-monetary. It is not normally based on contract.

Smith appealed to self-love. By self-love, he meant self-interest. This is what made his analytical system unique. This is the key to all free-market economic theory. *This is what distinguishes free-market economic theory from all other forms of social organization*. It is not based on coercion. It is not based on love of the brethren. It is self-consciously based on self-love.

What makes possible the widespread social division of labor is a system of sanctions that is applied by the marketplace: *profit and loss*. Institutionally, this is not a hierarchical system. Conceptually and operationally, it is. Consumers are at the top because they possess the most marketable commodity: money. This is why there really is such a thing as consumer authority. It is applied individually. There is no coercion involved. There is no chain of command that is governed by a system of rules. There is only one rule: *high bid wins*. That single rule is the basis operationally of the entire auction process.

The tremendous advantage of this system is that it operates without personal feelings of love. Love is always in short supply. We cannot increase our quantity or quality of love by means of the auction principle of high bid wins. The emotional connection associated with love is highly limited. This means the division of labor is limited within an organization that is governed by the principle of sacrificial love of others. The market, in contrast, is governed by the principle of self-love. We seek our own goals. We pay the price for seeking our goals. We bear the responsibilities associated with achieving our goals.

This motivation is consistent with the temporary biblical sanctions of heaven and hell, and also with the permanent sanctions of the new heaven and new earth and the lake of fire. Christians are highly self-interested with respect to where we will spend eternity. I am unaware of any major theologian within Christian orthodoxy who warns Christians not to be self-interested with respect to where they will spend eternity. On the contrary, they are highly focused on this individual goal. Jesus built the Christian church on these twin doctrines. They were not taught in the old covenant.

Jesus was clear that we have to love God above all else. We must seek first the kingdom of God and his righteousness, and all other positive sanctions will be added unto us (Matthew 6:33). [North, *Matthew*, ch. 15] We are not to take advantage of other people's weaknesses. This is also consistent with the Mosaic covenant, which imposed a system of morally compulsory loans at zero interest to poor brethren in the faith (Deuteronomy 15). [North, *Deuteronomy*, ch. 36] Nevertheless, there is nothing in the gospel that prohibits efficient service to others that produces a profit. The question is this: "What is your ultimate motivation?" If it is ultimately self-love at the expense of the love of God, then it is a suicidal impulse. This is the religion of mammon. But when people become wealthy on the basis of efficient service to consumers, which enables consumers to achieve their goals less expensively, they should not have moral qualms about their wealth. Their wealth is in serving others.

Conclusion

Jesus was clear that the basis of success in life is service to others. He made it clear that the hierarchical authority of the church should be based on service to others, not based on the goal of personal power. There is great responsibility associated with the possession of power.

Rulers are held to a higher level of accountability than the ruled are. They have greater responsibility.

There is no escape from personal responsibility. This is why Paul argued that church elders should receive payment for their services. They have great responsibility. They have to focus their time on leadership. This service has to be paid for. "Let the elders who rule well be considered worthy of double honor, especially those who work with the word and in teaching. For the scripture says, 'You shall not put a muzzle on an ox while it treads the grain' and 'The laborer is worthy of his wages'" (I Timothy 5:17–18). The criteria for exercising rulership in the church are rigorous (I Timothy 3). A church officer should not be a seeker after money. "He must not be addicted to wine, not a brawler, but instead, gentle, peaceful. He must not be a lover of money" (I Timothy 3:3).

The general principle of service leads to an elevation of authority. It applies in every area of life. It applies in the family. But every institution should be governed by the general principle of advancing the kingdom of God. No institution is autonomous. No institution should be governed primarily by the goal of increasing its authority irrespective of its service to those under its authority, who impute legitimacy to it.

The supreme advantage of the free market as a form of social organization is this: it harnesses the creativity of people with rival worldviews. The tremendous potential for personal wealth, influence, and lifestyle that the market offers to entrepreneurs persuades them to sacrifice for others who do not share their views of the way the world works and ought to work. They become servants of others despite the fact that they may care little for others. The result is long-term per capita economic growth on a scale never before achieved in history.

The free market has transformed the world as no other institution ever has in a shorter period of time: about two centuries. The economic world of 1800 was a world of the ancient past. It was closer to the world of 1800 B.C. than it was to our world. The vast increase in the division of labor and specialization that has taken place since 1800 has changed the world forever. It was the free market that accomplished this. It was not the church. It was not the state. It was not the family. However, the free market is dependent socially, judicially, and morally on the church, the family, and the state. It cannot function without justice. It cannot spin justice out of its own entrails, the way that a spider spins a web. But, as a means of social transformation,

nothing has compared with the free market as an engine of positive transformation in as short a period of time. *The principle of service is the basis of success in the market process.* But it is implemented more by the principle of self-love than the principle of love for others. This constitutes the most important revolution institutionally in the history of man since the destruction of the temple in A.D. 70. I hope that this multi-volume book provides the intellectual, moral, and spiritual framework to explain and justify this transformation of the world.

22

COMPETITION

Now there were six stone water pots there used for the Jewish ceremonial washing, each containing two to three metretes. Jesus said to them, "Fill the water pots with water." So they filled them up to the brim. Then he told the servants, "Take some out now and take it to the head waiter." So they did. The head waiter tasted the water that had become wine, but he did not know where it came from (but the servants who had drawn the water knew). Then he called the bridegroom and said to him, "Every man serves the good wine first and then the cheaper wine when they are drunk. But you have kept the good wine until now" (John 2:6–9).

Analysis

This was the first of Jesus' miracles (v. 10). Jesus supplied the bridegroom with the highest quality wine that was available. The bridegroom had not purchased enough wine. He was about to be embarrassed at his own wedding. Jesus saved him from this embarrassment. Everyone who attended the wedding feast was treated with high-quality wine. Amazingly, they received this late in the feast.

It is clear from the comment of the waiter what the prevailing practice was in the region. The organizers of a feast would serve the good wine first, when everybody was alert to the taste. But, as the evening progressed, and people's taste buds became less discriminating as the effects of the wine took over, they would serve wine of lesser quality. This certainly was a rational response to the effects of the wine. It seems wasteful to supply the best wine at the end of the wedding, when the attendees would not perceive the superior quality of the wine. But Jesus was not under economic constraints. Since He could make wine out of water, why not make the best wine? If you are going to perform a miracle, perform a spectacular one. In this case, spectacular meant supplying the best wine at the end of the feast.

Jesus could have gone into the wine-making business. This would have been a waste of His talents. But if He had done so, He would have been a formidable competitor. How could any other winemaker in the region or anywhere else have competed with someone who could supply the best-quality wine for the price of water? From the point of view of the competing winemakers, this would have been unfair competition. They would have been correct. It would have been unfair. Jesus would have been relying on miracles to supply the local market. This would have been the equivalent of turning stones into bread (Matthew 4:3–4). [North, *Matthew*, ch. 1] But it was a one-time event. No doubt local winemakers breathed a sigh of relief when they realized that it was a one-time event. I have no doubt that word would have spread about the miracle within the local winemakers' association.

Would it have been unfair competition for a local wine seller to enter the market and sell high-quality wine at a below-market price? The answer is no. Local wine sellers might have complained about this unfair competition, but from the point of view of consumers in the region, the newcomer would have been welcomed with open arms and open purses. From the point of view of the buyers, this new competition would have been a tremendous advance in cooperation between the seller and local buyers. From their point of view, there would have been nothing wrong with this new competition. It would have been a benefit.

A. High Bid Wins

Competition in a free market is based on the distribution principle of an auction: high bid wins. People who wish to secure ownership of a particular scarce economic resource bid against each other. The auctioneer, who acts as both the legal and economic agent of the seller, awards ownership to the person who makes the highest bid and who then fulfills his promise by transferring money to the auctioneer. The auction is possible only because (1) all of the parties agree to this rule in advance and (2) no one challenges the outcome through the threat of violence, either private or judicial: invoking the state. The allocation of ownership is based on the principle that the person who offers the most money has a moral and legal right to secure ownership of any asset.

There is a subordinate rule that reinforces the principle of high bid wins. The auctioneer is not allowed to hire people to make false bids in or-

der to drive up the price of specific items. This is fraudulent. Such false bidders are called shills. The presence of shills undermines the integrity of the auction. A society may or may not have civil laws against this practice. Even if this is not declared illegal, if word gets out to participants that the auctioneer has adopted such a ruse, people will cease attending his auctions. They will seek out auctions operated by rival auctioneers. The corrupt auctioneer will suffer losses.

The auction process is the moral, legal, and institutional foundation of the market process. The free market is a gigantic auction. This is the best way to understand the free market. This is conceptually simple. You are less likely to make conceptual errors if you always begin your economic analysis with your understanding of how an auction functions. Begin with something simple. Then move to the complex. I developed this auction-based approach to economic theory in *Christian Economics: Teacher's Edition*, Part 1.

An auction is an institutional development of the principle of ownership. The right of ownership implies the right of disownership. This in turn implies the right of exchange. By "right," I mean legal protection from interference by third parties in the use of other people's property. This is a moral right. It should be a legal right. The clearest statement in the New Testament of this right is found in Jesus' parable of the field owner and the hired hands. The field owner hires laborers all day long. At the end of the work day, he pays them what they had agreed to. He pays them the same wage. The workers who had begun work early then complain. They had worked longer. They therefore deserved more pay. The field owner's answer is straightforward. "But he replied to one of them, 'Friend, I am doing you no wrong. Did you not agree with me for a denarius? Take what belongs to you and go. I choose to give to this last worker as I give to you. Am I not allowed to do what I choose with what belongs to me? Or do you begrudge my generosity?'" (Matthew 20:13–15).

Let us examine this passage in terms of the auction process. Early in the day, the field owner bid for the labor services of several men. They were not legally obligated to accept his offer. As sellers of labor, they had the right to wait for a higher bid. But there was uncertainty involved in this rejection. There might not be a higher bid. Because labor cannot be stored up, they would be risking the loss of money by rejecting the offer. This might be the highest bid of the day. They would return home empty-handed or at least

with less money to show for their efforts. They accepted his offer. This was a binding contract. He had to pay. They had to accept this pay. Payment would close the transaction.

At the end of the day, they learned that they might have received the same pay for less work, assuming that the field owner had made them the same offer that he made to other laborers. They complained that they had in some way been defrauded. They implicitly held to the labor theory of value: more work produces greater objective value. In contrast, the field owner implicitly defended the theory of subjectively imputed value. Early in the day, they had imputed more value to the promised money than they imputed to refusing the offer. Their imputation had changed retroactively. This retroactive imputation did not entitle them to a higher wage. He invoked the right of contract, which is an extension of the right of ownership. He did more than invoke it. He accused them of ingratitude. He asked a rhetorical question. "Do you begrudge my generosity?" Of course they did.

He had offered the highest bid they had received at the beginning of the day. We legitimately conclude that it was the highest bid by the fact that they accepted it. If there had been a higher bid for the same labor services, they would have rejected the lower bid. People prefer more to less. This is a law of human action.

All systems of economic policy that justify the state's interference in the free market's pricing process are in some way applications of the field workers' complaints against the field owner. Had the field workers then called in the civil government to compel the field owner to pay them more than they had accepted voluntarily, they would have moved from ingratitude to attempted theft. *Any civil government that has such wage control laws on the books is engaging in theft*. It is interfering with the right of workers and employers to come to mutually acceptable agreements regarding payment. The field owner is the loser. But there are unseen losers: prospective workers who are willing to work for less, but who are not given the opportunity. The politicians have made such contracts illegal. These workers are now unemployed.

This analysis of labor contracts applies equally well to all contracts. When the state sets the terms of trade, it thereby violates the biblical principle of private property that Jesus used in His parable. We can and should take this principle beyond the realm of current exchange. The parable was based on the fact that the early morning workers made a retroactive claim on the field owner. They wanted the terms of exchange changed after the

fact. They wanted out of their half of the contract. We see the same motivation in all programs of compulsory wealth redistribution by the state. Certain voting blocs pressure politicians to transfer wealth that was gained through voluntary exchange. They insist that economically successful businessmen should pay a higher rate of taxation than members of these favored voting blocs. The state then collects this money from businessmen and high-income workers, and it transfers a portion of this money to members of these favored voting blocs. This is done in the name of fairness. This was the same argument that was used by the early morning workers against the field owner. There is nothing fair about the claim. There is surely nothing fair about the politics of the welfare state.

Businessmen and rich people can also pressure politicians to set up favorable tax rates for them. Laws are written that protect large businesses from competition. This reduction of competition harms market participants who never hear superior offers—higher bids—from excluded businesses. This is a misuse of the monopolistic power of civil government. It violates the biblical principle of the impartiality of the law. "You shall do no injustice in court. You shall not be partial to the poor or defer to the great, but in righteousness shall you judge your neighbor" (Leviticus 19:15). [North, *Leviticus*, ch. 14]

Participants in an auction understand the moral legitimacy of the principle of high bid wins. They also understand that without this principle, some other method would have to be used to settle the question of who gets what, which is the question of who will be allowed to use his property in ways he sees fit. They understand that these other ways would be detrimental to them as participants in the auction. It would reduce the number of auctions. It would therefore reduce the number of opportunities that participants have of buying goods. It would also reduce their opportunities as future sellers to have potential buyers competing against each other to buy whatever they want to sell.

The problem is this: people who understand and accept both the moral legitimacy and the economic opportunities offered by "high bid wins" do not extend their understanding of the auction process to the market process. What they both understand and approve of in the case of a local auction they doubt in the case of the broader market, which is in fact a huge auction. Both auction processes rest on the moral legitimacy of private ownership. Both of them also rest on their efficiency in letting people com-

pete for ownership based on a single principle: high bid wins. What they do not question retroactively at the end of the day with respect to a local auction, namely, that the highest bidders go home with the items offered for sale, they question retroactively with respect to the highest bidders in labor markets, consumer markets, and capital markets. They call for legislation that interferes with the outcomes of these larger auctions.

B. The Harmony of Interests

When sellers compete against sellers for money offered by buyers, it may appear that there is no harmony of interests. The same is true of buyers who compete against buyers. Yet there is a harmony of interests among people who seek to defend a system of private ownership. Such a system allows exchange: disownership. This allows all people to specialize. This enables them to increase their wealth by increasing their output. To use the metaphor of an auction, buyers do not have a harmony of interests when they bid against each other for some item. But they do have a harmony of interests in seeing to it that the auction is conducted honestly. They understand that there will be other auctions if this one proves profitable to sellers, buyers, and the auctioneer, who represents both groups.

It is a mistake to regard the auction's system of competitive bidding as evidence of a disharmony of interest. It would make as much sense to regard two sports teams as having a disharmony of interests because members of both teams seek to defeat the other team. The game is a zero-sum game. The winners profit at the expense of the losers. But all of the participants enjoy the game, which is governed by rules. They have a harmony of interests. They would not like to see a cessation of the games in general.

Ludwig von Mises was on target when he wrote in *Human Action*:

> What makes friendly relations between human beings possible is the higher productivity of the division of labor. It removes the natural conflict of interests. For where there is division of labor, there is no longer question of the distribution of a supply not capable of enlargement. Thanks to the higher productivity of labor performed under the division of tasks, the supply of goods multiplies. A preeminent common interest, the preservation and further intensification of social cooperation, becomes paramount and obliterates all essential collisions. Catallactic [market] competition is

> substituted for biological competition. It makes for harmony of the interests of all members of society. The very condition from which the irreconcilable conflicts of biological competition arise—viz., the fact that all people by and large strive after the same things—is transformed into a factor making for harmony of interests. Because many people or even all people want bread, clothes, shoes, and cars, large-scale production of these goods becomes feasible and reduces the costs of production to such an extent that they are accessible at low prices. The fact that my fellow man wants to acquire shoes as I do, does not make it harder for me to get shoes, but easier. What enhances the price of shoes is the fact that nature does not provide a more ample supply of leather and other raw materials required, and that one must submit to the disutility of labor in order to transform these raw materials into shoes. The catallactic competition of those who, like me, are eager to have shoes makes shoes cheaper, not more expensive (XXIV:3).

Mises' disciple, Wilhelm Röpke, wrote this in his book, *The Economics of the Free Society* ([1937] 1963). He was responding to attacks on the free market's system of competition.

> Such attacks conveniently ignore the fact that it is the liberal economic philosophy which recognizes the latent disharmony between consumer and producer and which sees in competition the means of mitigating this disharmony and thus of safeguarding consumers' interests. Piquantly enough, the enemies of competition answer this argument by saying that it was liberalism, after all, which developed the doctrine of the harmony of economic interests. Thus we find the real advocates of disharmony engaging with high glee in the task of obstructing those who seek to mitigate the evil by ridiculing them as naive adherents of outworn doctrines of "harmony." *But our economic system can remain viable only if this disharmony is redressed by effective and continuous competition* (p. 69).

As I wrote in Chapter 10 of my economic commentary on Genesis, *Sovereignty and Dominion* (2012):

> There is a disharmony of interests apart from the mediating influence of the competitive free market, he concluded. Beware of those seeking monopolistic power. But the easiest way to achieve monopoly, he knew, is to gain the assistance of the civil government. If you wish to release the underlying disharmony of interests, he said, all you need to do is unleash the monopolistic powers of the civil government. What he described as the enemy of the harmony of interests—the enemy of a market-produced, competition-produced harmony of interests—is precisely the statist system that has been constructed by those who ridicule the market's form of competition and the idea of a competition-produced harmony of interests (Section E).

C. Critics of the Market Process

Critics of the free market say that the market is wasteful. It is wasteful because there are so many competitors in a particular market. Why should they compete against each other? Wouldn't it be wiser to have a central planning agency allocate everything associated with wine production to local producers? Then the planners could assign a low price for buyers. Under these circumstances, there supposedly would be no waste. The problem is this: *no one knows everything that needs to be known about producing better wine at a lower price*. Central planners surely do not know. Competition is a discovery process. This was the insight of F. A. Hayek in 1968. The article was translated into English and published in 2002: "Competition As a Discovery Procedure."

From the days of Adam Smith until today, critics of the free market have argued that some, much, or all of the social arrangement of voluntary exchange is immoral. In most cases, the critics claimed that if the profit motive were restricted, and if private ownership were restricted or even eliminated, the world would get richer. Nature supposedly is a cornucopia that is blocked by private property. But with the collapse of the Soviet Union on December 25, 1991, the few remaining socialists have claimed that socialism is moral, although not as efficient as the market. Max Weber argued in 1920 that this conflict between the claim of greater morality by the socialists and the claim of greater efficiency by the free market economists is inherently unresolvable. He was incorrect. It is solvable on a biblical basis. This book provides the foundation of how it can be solved.

1. Hostility to Competition

One familiar critique of the free market is this: it is competitive rather than cooperative. Socialists insist that competition pits buyers against sellers, employers against workers. If it were not for private ownership, they claim, cooperation would replace competition. This would lead to a more moral, more peaceful, less antagonistic society. In response, defenders of the free market argue that competition is a form of cooperation. This form of cooperation has the advantage of being more efficient and therefore more productive than cooperation based on government ownership of property coupled with good intentions. This argument has not persuaded critics of the market.

First, biblically speaking, we know that any call for the abolition of private property is a challenge to the Bible's affirmation of the legitimacy of private property, most notably the commandment against theft (Exodus 20:15). [North, *Exodus*, ch. 28] Jesus was clear about the legitimacy of private property in His parable of the field owner and the hired hands. Some of the workers complained about the pay scale: the same for workers who worked varying amounts of time during the day. They asked for more money than they had agreed to. The field owner replied: "Am I not allowed to do what I choose with what belongs to me?" (Matthew 20:15a). [North, *Matthew*, ch. 40] So, from the beginning, we can be sure that the critique of market competition is not based on the moral high ground. It is based on the moral low ground.

Second, the argument against competition is an argument against voluntary exchange. It calls into question the moral legitimacy of someone who seeks an exchange of something he owns for something he does not own. In fact, it calls into question the ethics of two people who seek such an exchange. It implies that voluntary exchange is somehow tainted morally. Yet the heart of such an exchange is the desire to increase cooperation. Each of the parties to the transaction is making this offer: "If you give me what I want, I will give you what you want. We will both be better off after this exchange of ownership." They would not complete this transaction if either of them did not believe this mutual assurance.

Third, the argument fails to understand the nature of competition. It rests on an unstated assumption: *sellers compete against buyers*. It also rests on a second assumption: *sellers are in a superior position to buyers*. They can

therefore make greater profits by exploiting buyers. They do not define the word "exploit" in terms of any economic theory. Both of these assumptions are incorrect in most cases.

2. "Sellers Compete Against Buyers"

Let us consider the first assumption, namely, that sellers compete against buyers. Sellers of goods and services prefer that buyers pay more. Buyers of goods and services prefer that sellers ask for less. Their motives are the same: self-interest. The questions that I have for those who argue this way are these. First, what keeps sellers from increasing their prices? The answer is this: other sellers who threaten to undercut any seller who raises his price. Second, what keeps buyers from insisting on discounts as a condition of making a purchase? The answer is this: other buyers will buy all of the output of the sellers at the retail price. Sellers cannot get what they want because of rival sellers. Conclusion: *sellers compete against sellers*. Buyers cannot get what they want because of rival buyers. Conclusion: *buyers compete against buyers*.

There are cases in which there are few competing sellers. An example would be an oasis. There are also cases in which there are few competing buyers. An example would be an imminent hurricane. Sellers of automobiles may have to offer discounts if they do not want their inventory damaged or blown away. They prefer to transfer ownership to a buyer.

There are cases of face-to-face negotiators who do not know what the other party will accept. A seller does not know how much money a specific buyer will pay. A buyer does not know how much a specific seller will accept. There is no developed local market for this particular asset. There is no widely known price. This situation applies to real estate and used goods: "one of a kind." It applies to medical services and repair services generally. It applies to most new goods.

With the growth of the Internet in the first two decades of the twenty-first century, information regarding prices and even quality is freely available. It costs no extra money to do a Web search, only time. The richest man in history in mid-2018 was Jeff Bezos, who founded Amazon. He was worth $141 billion. This was up $31 billion since the beginning of the year. He attained this wealth by cutting prices and gaining free reviews from purchasers. Rival sellers see Amazon as a ruthless competitor. Buyers do not agree. Amazon provides rapid price information on three billion items. This is

steadily growing. The zones of price ignorance shrink. This means that the zone of price negotiation shrinks. Competition is minimized between buyer and seller. Online, it does not exist. Sellers of new goods on Amazon declare: "Take it or leave it." But sellers of used products, especially books, can compete by price. For those buyers who are content with a clean used book, low bid wins—low from the seller's point of view. This means high bid from the point of view of the buyer: "more books for the money."

When buyers compete against buyers, and sellers compete against sellers, this competition produces greater cooperation between specific buyers and specific sellers. How? It reduces the zones of ignorance, which reduces potential competition. Exchanges take place more rapidly, meaning less time wasted. Put differently, *competition lowers transaction costs*. This increases the net return from exchanges. The law of price asserts itself: when the price falls, more is demanded. Specifically, when transaction costs fall, more transactions are demanded.

3. "Sellers Are Dominant Over Buyers"

On the contrary, buyers are dominant. Here is the reason. By common usage, buyers possess money. They pay money to sellers. What is money? Money is the most marketable commodity. A highly marketable asset has these characteristics. It can be sold immediately without: (1) offering a discount, (2) paying a commission, or (3) advertising. When you walk into a store, and you see something you want to buy at a listed price, the seller will not argue with you if you offer to pay him his listed price. He may try to sell you something in addition to it. If you have cash, you may be able to negotiate a discount in a small shop owned by the seller. If it is a used item, you may be able to negotiate a discount. Why? Because the local seller has a limited market. You tell him that you want to buy the item. He wants to sell it. But there may be no other person today or this week or this month who will want to buy that item at anywhere near the listed price. He wants your money now. He has bills to pay. He wants to buy more inventory. He suspects that you may not need the item at all. You have lots of other items or services you would like to buy with your money. Every seller in town wants your money at retail prices. All sellers are competing with each other for ownership of the most marketable commodity. Only a comparatively few buyers are competing with each other to buy what specific sellers sell.

In rare cases, the seller does not need to sell, but the buyer needs to buy. I have already mentioned the premier case: an oasis. Here, the seller can charge all the traffic will bear for his water. (The phrase, "all the traffic will bear," comes from an anti-capitalist, anti-railroad American novel published in 1901, *The Octopus*.) There is no local market that is less developed than an oasis in a desert. But the traffic to and from an oasis is minimal. With the increase in airline traffic, oasis traffic is steadily being reduced. The few people who stop by for a drink of water are poor people. The owner of the oasis cannot get rich from their payments.

The free market's critics have contrasted competition with cooperation. The two categories are not the same. The critics do not understand how the market's auction process works. Its twin sanctions of profit and loss increase cooperation between buyers and sellers. The auction process does this by means of competition: buyers vs. buyers, sellers vs. sellers. It is out of this competition that prices are formed. The profit-seeking participants in the market for information then spread information regarding prices to millions of buyers and sellers. Amazon illustrates this better than any company in history.

D. Quality and Price

These are two forms of market competition: quality and price. Quality competition is appropriate when selling to wealthy people or people with authority. Price competition is appropriate when selling to the rest of humanity.

1. Quality Competition

The great master of quality competition in the Bible was Joseph. "Joseph's master took him and put him in prison, the place where the king's prisoners were confined. He was there in the prison. But the Lord was with Joseph and showed covenant faithfulness to him. He gave him favor in the sight of the prison warden. The prison warden gave into Joseph's hand all the prisoners who were in the prison. Whatever they did there, Joseph was in charge of it. The prison warden did not worry about anything that was in his hand, because the Lord was with him. Whatever he did, the Lord prospered" (Genesis 39:20–23). [North, *Genesis*, ch. 32:B]

His life best illustrates Jesus' principle of dominion through service. *God requires His people to seek increased responsibility. This is the strategy of dominion.* God has a program that enables His people to gain more au-

thority in history. This program requires His people to provide improved service to buyers. They must learn to be better performers than the competition. They must distinguish themselves as suppliers of desirable goods and services. This is especially important for covenant-keepers who are in a minority condition either socially or economically. This is how they pull themselves out of poverty and social inferiority. They pull themselves out by being lifted up by people who are richer and better connected socially. These people do not do this as a favor. They do it with their money. They pay economic and social outsiders for superior service.

There are two ways to provide improved service. One way is to cut prices. You provide the same quality of service for a reduced price. The other way is to improve service at the same price. Both ways provide additional benefits to the buyer. This makes repeat business more likely. Over time, the person who supplies superior service gains the confidence of the person buying the service. The person buying the service steadily transfers greater responsibility, meaning greater authority, to the person who is supplying superior service.

The case of Joseph in Egypt is the classic case in the Bible of somebody who supplied superior service. He first supplied superior service to his father, which enraged his brothers. They sold him into slavery. That enabled Joseph to be in a position to gain enormous authority in Egypt. Potiphar bought Joseph from the slave traders. Joseph became a superior servant in Potiphar's household. Potiphar transferred great authority to Joseph as a result. Because Potiphar's wife betrayed Joseph, Potiphar put him in prison. This prison was the Pharaoh's prison. This was the perfect place for Joseph to move up the ladder of authority. Joseph became such a good organizer that the overseer of the prison transferred all authority to him. Next, Joseph provided excellent service to the two banished employees of the Pharaoh, both of whom wanted their dreams interpreted. He provided accurate interpretations. The survivor was in a position two years later to recommend Joseph's services to his employer, the Pharaoh. This led to the next stage of Joseph's responsibility: interpreting Pharaoh's dream. This led to the next level of authority, when Pharaoh placed him second in command in Egypt. In this office, he saved the lives of his family. Had he not been the most efficient servant in Egypt, he would not have been able to do this.

His service was based on quality competition. As a slave, he supplied services for the cost of room and board. He supplied above-average services

at this exceptionally low price. This is how he distinguished himself from all of the other servants in Egypt. He need not have been so efficient. He could have supplied services that most slaves supplied, or most prisoners supplied. But he recognized that he was in a position to represent God before these pagans, so he supplied good services. God blessed him as a result.

This principle of quality competition is easy to understand. His brothers understood it. They understood that his performance was going to lead to his superiority over them. They resented this. As it turned out, this is exactly what happened. But it did not happen in the promised land. It happened in Egypt. There were probably other slaves in Potiphar's house who resented him. Undoubtedly there were prisoners in Pharaoh's prison who resented him. But his customers welcomed his performance. They were not getting something for nothing, but they were getting exceptionally valuable services for practically nothing. Every buyer likes a better deal. Quality competition is suitable when you are selling to people with considerable wealth. Potiphar had wealth. He could afford to buy a slave. He had a large household that required careful management. The jailer probably did not have wealth, but he had authority. He was in control of the operations of the prison. He was in a superior position. Pharaoh had enormous wealth and enormous power. In contrast, price competition generally targets a different market: people without great wealth.

There is no inexpensive way for existing sellers to complain against new sellers who provide exceptional quality. The buyers have money. They presumably are experienced buyers. They are well aware of what they want. They have time to shop for sellers who can supply them with better services. They may be politically well-connected. An existing seller cannot find a ready argument to complain against an interloper who provides an exceptionally good service. This is why quality competition is a good strategy for extending dominion. It produces minimal organized resistance from existing suppliers. But it is not the only strategy. There is also price competition.

2. Price Competition

The poorer a customer is, the more that he is motivated to buy in terms of price. He has limited funds. He must spend a high percentage of his income on necessities: food, shelter, water, heat, and lighting. As he grows wealthier, he increases his consumption of what he previously had regarded as luxuries. This is the effect of *declining marginal utility*. After he con-

sumes the basics, which are high on his list of priorities because of their high subjective value, the value to him of one additional unit of monetary income falls. He purchases goods and services that previously had been too expensive for him. He ran out of money before he could buy them. Now he can buy them.

He may buy more of the same category of consumption units. If he lives in a cramped space, he may rent additional space. His next move upward spatially may also be a move upward socially. He rents in a safer neighborhood or a neighborhood with better access to transportation. These are quality improvements, meaning lifestyle improvements. But he is still concerned about price. He does not want to pay more than he can buy through careful shopping and sharp negotiating.

Existing sellers face consumer resistance. Most people have tight budgets. They cannot afford to buy on a whim. To get them to buy, some sellers adopt new sales strategies. One way is to offer loans to buyers. This appeals to people who discount the value of future income at a higher rate. They are more present-oriented. They think: "I would rather consume more now rather than later." They spend borrowed money now. They must therefore reduce their consumption in the future because they will have to repay the debt plus interest. This marketing strategy is based on increasing present demand. Some buyers allocate their wealth by shifting consumption from the future to the present. Debt enables them to do this.

Another way to increase sales is to change the advertising. The seller can increase his advertising budget. Or he can design marketing campaigns to increase the number of whim-based purchases. This persuades buyers to change their budgets. They had purchased other items before. Now they buy something new based on impulse buying. They will have to pay for this later when they find that they are running out of money faster than they had expected or planned for.

In poor societies, the most effective means of increasing sales is through price competition. Sellers lower their prices. This enables new customers to buy. These are customers who would not have bought earlier at a higher price. They had been willing to buy at a lower price, but no seller had offered a lower price. Now they buy. Price competition can also increase purchases by existing customers. They want to increase their consumption of items already in their budgets. Maybe they buy more fuel to heat their homes at a higher temperature for more hours during the day.

E. The Industrial Revolution

In the early decades of the Industrial Revolution, price competition was the most widely used sales strategy. Sellers offered goods to people who had not been able to afford anything like them. Cotton clothing was a major category. Cotton clothing had major advantages over wool. Cotton fabrics could be washed and dried more easily and therefore more often. Wives greatly appreciated this. Cotton fabrics could be colored more easily. This was good for making fashion statements. Wives also appreciated this. The Industrial Revolution accelerated after 1800. The French Revolution of 1789–1794 had radically changed people's fashions in Western Europe. The clothing of the poor people in Paris became the new standard. Ornate clothing disappeared among the males of the aristocracy, along with wigs. Women's fashions became more sensitive to color than to ornateness. Next, cotton clothes were lighter. This was a great advantage in summer. Rich people had worn cotton clothing for centuries. Poorer people wanted to take advantage of cotton clothing, but they could not afford to buy it. This changed after 1780, and it accelerated after 1800. Because of technological innovations in cotton production, mainly the introduction of the cotton gin in 1800, and also by improvements in the mechanized production of yarn and fabric, cotton manufacturers cut costs. Here is the *law of supply*: "When costs fall, more is supplied." Sellers increased their production. Then they had to find ways to sell this new production. The most cost-effective way was to lower prices. Here is the *law of demand*: "When prices fall, more is demanded." Sellers lowered prices. Sure enough, more was demanded.

This dual process of innovation in production and marketing launched an historically unprecedented era in man's history. Per capita economic growth has continued in the West at an annual rate of over 2%, except for the Great Depression (1930–39). Compound economic growth has spread to Asia ever since the end of World War II in 1945. Mass production and price competition have jointly transformed the world.

Price competition is seen as a scourge by existing producers who find it difficult to compete. But it is seen by consumers as a great benefit. This benefit is more easily seen over decades than it is year to year. Year to year, we do not perceive the change. Over decades, we do. When we study economic history since 1800, this change seems inconceivable. In 1800, it was inconceivable. Yet this has taken place in a short period of time.

How short? I offer the following evidence. John Tyler was the tenth President of the United States, 1841–1845. He was born in 1790, the first full year of President George Washington's administration. Except for cheap printing, the world of 1790 was not fundamentally different from the world in the time of Jesus in the first century A.D. Most men worked as farmers. They used marginally better tools in 1800, but per capita wealth had not changed much. Brief eras of greater wealth had always led to a larger population. There were more people in 1790 than in Jesus' day. There were perhaps 250 million people at the time of Jesus' birth. There were possibly a billion people in 1790. Travel was still as slow as it had been in Jesus' day. Roads were poor. Stone roads leading to Rome were superior. Chariots could travel on them except when the roads were frozen or covered with snow. Most people's homes were small in 1790. Heating them was still based on wood, which was inefficient, although cheap in North America east of the Mississippi River: mid-continent. Labor time in chopping down trees and then chopping them into firewood was still high. Only after David Rittenhouse's 1780 improvement of Ben Franklin's 1741 iron stove did iron stoves begin to sell well. Lighting was by candles. These candles were not much different from the one invented by some Roman in 500 B.C. There was no system of aqueducts comparable to Rome's.

Here is the astounding fact: in December 2010, I interviewed Tyler's grandson. As I write this, he is still alive. So is his younger brother, who was interviewed on national television in 2012. (http://bit.ly/TylerInterview2012) *The transformation of the world took place in three generations in one family.*

F. Resentment Against Price Competition

Existing competitors resent the intrusion of an innovative seller who prices his goods and services significantly below prevailing prices. Existing competitors know that some of their customers will start buying from the competitor. Their income will fall.

1. Asymmetric Politics

Customers appreciate it when they have a wider range of choices. They also appreciate it when sellers begin to offer better deals to them. They understand that they are benefitted by an increasing supply of goods and services. But there is a problem. Customers are also producers. In their own

areas of service, they resent newcomers who offer superior deals. Because most of their income or even all of their income is dependent upon their salaries, they are focused more on the threat offered by a new competitor than they are on the benefits of multiple competitors coming into the markets in which they are buyers. They buy from many sellers. A new seller is a benefit, but generally his presence will not make a large difference in the life of a customer. In contrast, the presence of a new competitor in the market in which a customer derives his income is a major threat. Therefore, citizens tend to be more responsive to politicians who promise that they will not face competition as producers.

Politicians in search of campaign contributions promise special-interest groups to vote to limit the number of competitors entering into a particular market. They gain support from existing suppliers in a market. It is much more difficult for politicians to mobilize consumers in general to resist intrusions into a marketplace that will reduce the number of suppliers. *Politically, the two markets are asymmetric*. It is less costly for a politician or a representative of a special-interest sellers' group to persuade employees in a specific industry or occupation to pressure their politicians to erect barriers to entry into their market than it is for a rival politician to persuade employees in many different fields to pressure their politicians to oppose the imposition of a new barrier to entry into a specific market. This is why there are continual pressures on politicians to provide subsidies to specific industries or else create barriers to entry against price competitive sellers in specific industries. *A legal barrier to entry into an industry has the same economic effect as a subsidy to that industry*. But a barrier to entry is generally less controversial politically than an outright subsidy. Voters can understand a subsidy. They are paying for it. Voters generally do not understand that a barrier to entry is an indirect subsidy.

2. Consumer Protection

Politicians and special-interest groups use the argument that price competition lowers the quality of goods. Therefore, price competition exploits the poor. This argument has been used in the West for a millennium or longer. Voters still believe it. They are persuaded to believe that a lower price means lower quality. Sometimes it does, but this is not always the case. With the development of digital products, this argument is no longer as popular as it was. Consumers understand that lower prices can also be

accompanied by improved quality. The pace of innovation is far greater in digital industries than it has been in any other industry in history.

The argument that consumers must be protected against predatory sellers is the primary argument in favor of occupational licensing. Occupational licensing has spread across the West at a rapid pace ever since the end of World War II in 1945. Occupational licensing is a barrier to entry. It raises the price of goods and especially services by reducing the number of sellers. It reduces the number of choices available to poor people. It also reduces the number of choices available to rich people. But rich people can afford to spend more for what they buy. Poor people find it difficult to spend more.

The implicit assumption behind occupational licensing is that customers do not really know what they want. They do not really know when they are being served well. The government then intervenes in the market to impose barriers to entry. These standards are officially based on quality rather than price. The quality standards that are adopted by the regulatory agencies are usually supplied by the special-interest groups (trade associations) that represent existing sellers in the industry. Existing sellers are promised that they will not be required to go through the formal testing process that will screen out future competitors. So, they become the beneficiaries of the new regulations. They will not face as many new competitors who are likely to compete on the basis of reduced prices.

G. The Pricing of Priest-Like Services

The law of the market is this: high bid wins. But the market is only one aspect of the social division of labor. There are also covenantal institutions: family, church, and state. These are not governed by the principle of high bid wins. Their varying systems of institutional sanctions are not based on the profit-and-loss system of the market. Why is this the case? Because the market allows the sale of privately owned property. This is the meaning of high bid wins. A man does not have the legal authority to sell his wife into servitude. He does not have the right to sell his citizenship to a non-citizen. The same is true of church membership. This is why economic analysis that explains the market process quite well applies poorly or not at all to covenantal institutions. I have discussed this at length in my book, *The Covenantal Structure of Christian Economics* (2nd edition, 2018).

There are some services that are related to issues of life and death. I call these priestly functions. The obvious example is medical care. If entrance

into this market were open to all, then the price of medical services would be lower. Competition would lower prices. This was understood by the classical Greeks. In the oath attributed to a physician, Hippocrates, who lived in the fifth and fourth centuries B.C., we read this. "I swear by Apollo the Healer, by Asclepius, by Hygieia, by Panacea, and by all the gods and goddesses, making them my witnesses, that I will carry out, according to my ability and judgment, this oath and this indenture." It was covenantal. It invoked gods. The oath to the gods created a priesthood. The promise to the teacher was a way to create a cartel: a closed group that could charge consumers high prices for secrecy-based services.

The oath was a self-maledictory oath. It called down the wrath of the gods on the oath-taker if he violated its terms. "Now if I carry out this oath, and break it not, may I gain for ever reputation among all men for my life and for my art; but if I break it and forswear myself, may the opposite befall me." As with all covenantal oaths, it had an ethical component. "I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing. Neither will I administer a poison to anybody when asked to do so, nor will I suggest such a course. Similarly I will not give to a woman a pessary to cause abortion. But I will keep pure and holy both my life and my art. I will not use the knife, not even, verily, on sufferers from stone, but I will give place to such as are craftsmen therein."

The next section was a promise to the man who taught him medical secrets. This was a strictly economic component. It was self-serving on the part of the teacher, who was conveying valuable information in exchange for the promise of future support. "To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the physician's oath, but to nobody else."

Members of this priesthood could charge high prices for services rendered. They would face reduced competition because the secrets could not be shared by existing members without violating the oath. This restriction on the production of suppliers is the classic mark of the guild or cartel. This was a strategy of restricting supply by a barrier to entry: the oath.

This oath was a mixture of two elements: a self-maledictory oath to gods and a promise to support the teacher if he ever needed support. This was an income-insurance program. It reduced the teacher's risk. This was also a brotherhood. The oath and the brotherhood were self-serving.

This oath was not enforced by the state. Formally, it was enforced by the gods. Fear of the gods was supposed to keep the student from violating the oath by sharing the priesthood's secrets with outsiders who were not bound by the oath. This would keep prices higher than what would have prevailed in the absence of the oath.

The Mosaic law had a priesthood. It was a closed community. Only members of the tribe of Levi could be priests. Levites were paid a tithe of the net output of farmland (Exodus 18:21). In addition, priests officiating at the altar received the various food offerings that the people offered to God at the tabernacle/temple (Leviticus 2:3–10, 4:26, 7:6, 23:10–11, 19–20; 24:9). Also, they officiated at a leper's offering of oil (Leviticus 14:10–13). One of the reasons why they publicly ate the offerings was to make it clear to the people that the offerings were not consumed by God. God did not need their offerings. The error of assuming that there are gods who needed offerings afflicted the offerings of other ancient civilizations. If a Levite had a side businesses, he faced competition. He had no privileged position in his profit-seeking professions. He could not charge higher prices than the market established without facing the threat of price competition. In the New Testament, ministers are paid salaries by the church. "Let the elders who rule well be considered worthy of double honor, especially those who labor in preaching and teaching. For the Scripture says, 'You shall not muzzle an ox when it treads out the grain,' and, 'The laborer deserves his wages' " (I Timothy 5:17–18). They were to receive no other compensation for their labor, such as the sale of baptismal services or the Lord's Supper. The ministers had a monopoly over the administration of the Lord's Supper. This was not to be abused by converting the sacrament into a source of extra income beyond a salary for all of their labors. In the Roman Catholic church, any priest who charged for the last rites would be brought under discipline.

In certain rare cases, a physician may be in a unique position to administer life-saving aid to an injured person. The injured person is not in a position to bargain. He cannot shop for medical services. There is a temporary barrier to entry into a local market. The Mosaic law laid down an ethical principle: do not harm widows and orphans. Widows and orphans were

representative examples of people without defense or defenders. This law rested on a basic biblical principle of ethics. Thus, for a physician to charge the injured person all of his wealth, and even get him to sign a contract to this effect, would be a violation of this principle. While there is no biblical civil law against this, there is also no biblical civil law requiring a court to enforce the terms of the contract. I can think of no society in which such a contract would be enforced. The physician would risk losing his reputation if he tried to collect this payment, let alone took the now-healed person before a court. The medical guild might even revoke the person's license to practice medicine, at least if the case received a lot of publicity. Even if other medical guild members did not see the unethical aspect of such a contract, they would not want to risk scrutiny by the civil authorities, who might establish a law to control the profession as compensation for granting it a monopoly through licensing. They prefer self-regulation by an ethical board to outright intervention by politicians or bureaucrats. On the other hand, if a physician provided such services for free, but the patient died or suffered permanent harm as a result of the emergency treatment, no civil court should honor the claim. In the United States, numerous states have passed laws exempting a physician from legal liability if he treats an injured person at the roadside. These laws are called good Samaritan laws, named after Jesus' parable of the Samaritan who helped the injured victim of robbers (Luke 10:25–37).

Contracts are not sacred. They are not oaths taken before God. They are therefore not covenantal. While a society faithful to the Bible will create a civil court system that enforces private ownership, which means that it enforces the right of contracts in exchanges of ownership, these courts have the right to refuse to enforce the terms of a contract if it violates explicit biblical laws or fundamental biblical principles. Every society has contracts that its courts refuse to enforce. The more predictable these non-enforced contracts are, the fewer of them there will be. The likelihood of non-enforcement raises the price of collecting from buyers or sellers. When the price rises, less is demanded.

Conclusion

Critics of the free market insist that competition is wasteful. They insist that central planning will not waste resources. They say that central planning overcomes a moral weakness of capitalism. They see competition as a

moral weakness. They insist that cooperation is morally preferable to competition.

The biblical answer to this line of reasoning is this: *when we offer someone else a better opportunity, we are offering to cooperate*. No one knows all of the opportunities that are available in a society. Therefore, individuals who believe they can offer a better opportunity approach a buyer to make the offer. The potential buyer decides whether it is a good opportunity. He is legally responsible for the allocation of his money, so he should have the legal authority to make the decision to buy or not to buy. *Ownership and responsibility are inseparably linked*. When a seller offers a potential buyer an opportunity, he is competing against other sellers. His competition with other sellers is an inescapable aspect of offering to cooperate with a buyer. Therefore, analytically speaking, *there can be no cooperation without competition*. Anyone who criticizes the free market for being competitive is really criticizing the market for being cooperative.

When Jesus recommended service as the way to leadership, He was speaking to an outcast group of Christians in an outcast nation of Jews. He understood that service is the best way to gain cooperation from hostile people around us. *Offering service is an offer to cooperate*. So is an offer to sell a product or service.

Market competition is the best way for any group that is discriminated against to gain acceptance in society. Over time, people appreciate better deals. Additionally, outsiders who enter a market through price competition gain resentment by existing sellers. Existing sellers may be able to get the government to restrict price competitive offers. But if the sellers continue to offer price competitive goods long enough, they gain support from at least some segment of the market.

Quality competition is more difficult for existing sellers to oppose. Existing sellers pride themselves on offering high-quality services. They enjoy the reputation of having provided such services. So, when a newcomer enters the market and offers even better services, it is difficult for existing sellers to oppose his presence in the marketplace.

Quality competition usually operates in markets where people have more money, greater prestige, and greater power. They are the Potiphars of this world. It is not easy for poor people or even middle-class people to come into contact with rich people. Rich people surround themselves with screeners. The screeners do their jobs well. They make it difficult for new

sellers to contact rich people directly. In contrast, price competition, when legal, enables new sellers to penetrate an existing market. The seller may not have to be in a face-to-face relationship with the buyer. He just has to offer his product at a significant discount from what existing sellers ask buyers to pay. It is possible for an outsider to get exceedingly rich through price competition. At the beginning of the twentieth century, Henry Ford did this by selling a low-cost automobile, the Model T. But the supreme example of a man who got rich through price competition is Jeff Bezos, who started a discount bookselling company in 1995: Amazon. A quarter century later, he was the richest man in history before his divorce settlement. He was the richest man in history even after his divorce settlement.

23

PLAN RECONCILIATION

When Joseph's brothers saw that their father was dead, they said, "What if Joseph holds on to anger against us and wants to repay us in full for all the evil we did to him?' . . . His brothers also went and lay facedown before him. They said, "See, we are your servants." But Joseph answered them, "Do not be afraid. Am I in the place of God? As for you, you meant to harm me, but God meant it for good, to preserve the lives of many people, as you see today" (Genesis 50:16, 18–20).

Analysis

Joseph's brothers had sold him to slave traders, who sold him to Potiphar in Egypt. Potiphar soon placed him in charge of his business until his wife attempted to seduce him, and then lied that he was the culprit. Potiphar put him in prison, where the warden soon placed him in charge of everything. He correctly interpreted a pair of dreams related to him by a pair of Pharaoh's servants, who had also been cast into the prison by Pharaoh. Two years later, he interpreted Pharaoh's dream: seven fat cattle followed by seven lean cattle. He said this dream predicted seven years of large grain harvests followed by seven years of famine. Pharaoh believed him, and he immediately elevated Joseph to second in command. Joseph saved Egypt from famine. Then he saved his brothers and their households from famine.

At each stage, there were dreams and plans. The brothers originally had a plan for Joseph's life. So did Potiphar. So did his wife. So did the warden. Each plan ended very differently from what the planners had planned. Pharaoh gave up planning. He turned national economic planning over to Joseph. Joseph was capable as a central planner. He had access to explicit revelation from God regarding Egypt's economic future. Joseph was an entrepreneur. He understood the future economic environment. He executed his plan. He confiscated grain as taxes when grain was cheap. He stored it in Pharaoh's newly constructed storehouses. He used Pharaoh's money to

build these storage facilities, which would have been huge. Then, when famine arrived on schedule, he sold the grain back to Egyptians at high prices. He bought low (the price of collecting the grain and storing it) and sold high at an enormous profit. He bought the Egyptians' freedom. They sold their lands to Pharaoh. They would henceforth pay him an income tax at a flat rate of 20%. (In my era, Egypt would be regarded as a tax haven.)

This is the story of a series of individual plans for Joseph. Each plan had coherence to it. Each had ends and means. Joseph was the means. Each plan led to greater authority for Joseph. None of the individual planners could have foreseen what God had in store for Joseph and his family, least of all his brothers. This sequence of dreams and plans began with dreams. In two dreams, Joseph dreamed that he would rule over his brothers. They resented these dreams. They planned to kill him. This would put an end to his dreams of authority. "Come now, therefore, let us kill him and cast him into one of the pits. We will say, 'A wild animal has devoured him.' We will see what will become of his dreams." His brother Reuben changed their minds with a profit-seeking plan: sell him to slave traders instead (Genesis 37). At the end, Joseph's original dreams came true. He ruled over his brothers.

The brothers bought low and sold high. The slave traders did the same. Potiphar bought low and reaped a profit, but his wife short-circuited his plans. He was not paid when he placed Joseph into the prison. The warden got him for the price of a cell and food. He reaped a handsome profit: cheap management services of a high order. Pharaoh got him initially for free. He immediately recognized an economic opportunity. This man had access to God. Pharaoh could put him into service as a central planner and thereby reap a large profit. Pharaoh's judgment was correct. At every stage, the planners used Joseph as an investment asset: *a means to an end.* The brothers, Potiphar, the warden, Pharaoh's cupbearer, and Pharaoh all profited. Potiphar's wife and Pharaoh's baker reaped a loss. But the baker would have reaped this loss anyway: execution. The only big loser was the wife. She saw her targeted victim elevated to Egypt's second in command. That must have been a bitter pill.

In the early stages, the planners used coercion to reap their profits: kidnapping, slavery, and prison. In the end, Joseph used coercion to extract wealth from Egyptians, but then he saved their lives. Central planning by the state necessarily uses coercion, but in this case, heavenly intervention saved a nation. The theology of Egypt elevated the Pharaoh to the position

of the god/society link. It was a theology of the divinized state. This was a theology of tyranny. Through Joseph, God gave the Egyptians a taste of what this theology implies in theory: negative sanctions. But, in His common grace, God saved their lives. God also saved the lives of Joseph's brothers and their families. His common grace to a nation of covenant-breakers blessed the lives of covenant-keepers. *This is the biblical historical model.*

Each profit-seeking planner was responsible before God for the evil of his plan. Joseph's brothers understood this in Egypt. They feared Joseph's retribution. But Joseph was a man of grace, peace, and forgiveness. He did not seek vengeance against any of those who had misused him as a means to their ends. They had treated him as if he were their lawfully purchased property. He was not. He was the victim of kidnapping. God's law demands the death penalty for this crime. "Whoever kidnaps a person—whether the kidnapper sells him, or that person is found in his hand—that kidnapper must be put to death" (Exodus 21:16). As second in command, he could have imposed this lawful penalty on them all. He did not.

His reply to his brothers was clear. "But Joseph answered them, "Do not be afraid. Am I in the place of God? As for you, you meant to harm me, but God meant it for good, to preserve the lives of many people, as you see today" (Genesis 50:20). Here we have a declaration of God's absolute sovereignty in the affairs of men. Men act in terms of His sovereign decree. "The king's heart is a stream of water in the hand of the Lord; he turns it wherever he pleases" (Proverbs 21:1). It is not just a king's heart that is in the hand of the Lord. It is all hearts.

Each planner had a plan. Each plan was part of an all-encompassing plan. God had announced the outline of this plan to Abram. "Then when the sun was going down, Abram fell sound asleep and, behold, a deep and terrifying darkness overwhelmed him. Then the Lord said to Abram, 'Know for certain that your descendants will be strangers in a land that is not theirs, and will be enslaved and oppressed for four hundred years. I will judge that nation that they will serve, and afterward they will come out with abundant possessions. But you will go to your fathers in peace, and you will be buried in a good old age. In the fourth generation they will come here again, for the iniquity of the Amorites has not yet reached its limit'" (Genesis 15:12–16). The details of the plans of every planner in the sequence were reconciled by God's grand plan. His plan was based on a covenant among God, Abram, and Abram's unborn heirs.

A. Faith in Ethical Causation

Men seek their own ends. They have purposes (point one). Their plans are extensions of their individual purposes (point two). Most people think of themselves as ethical. They think they are doing the right thing (point three). They hope for a profit as the outcome of their plans (point four). They plan to repeat this process over and over, and then at last go to their well-deserved individual rewards (point five).

This outlook is based on a presupposition: *there is ethical coherence in historical causation*. The world is not ethically random. Therefore, our lives are not ethically random. We make our plans in terms of our faith that, in the long run, honesty really is the best policy. If we are honest, we will profit along the way. In a popular American aphorism, we will do well by doing good. This outlook is based on the Bible. Specifically, it is based on the first 13 verses of Leviticus 26 and the first 14 verses of Deuteronomy 28. There are parallel passages. The Book of Job is also based on this outlook. Job's assumption regarding this underlying ethical coherence was rewarded, but only in Chapter 42. In short, most people want to believe that there is a predictable cause-and-effect relationship between the righteous plans and acts of responsible individuals and the profitable outcomes of these acts. People recognize, as Job learned, that this predictability has limits. It is not immediate. But, in the long run, in the lives of most people, there is predictability between doing the right thing and achieving a positive result.

In the Christian West, this faith extends to the society at large. We believe this: if the laws of the nation are just, then lawful actions by most individuals most of the time will produce positive outcomes all across the society. *The righteousness of the legal order establishes the limits of men's actions*. If citizens and residents of the nation restrain themselves and follow the law, and if they act honestly in their business dealings, the nation will prosper. *There is an ethical coherence unifying the national one and the individual many*. This is Trinitarian social theory, although people rarely make this connection. It is the reconciliation of the one and the many. In short, it is the reconciliation of individual plans.

This outlook is optimistic. Where it is widespread in a society, it produces optimism regarding individual futures and the nation's future. *This optimism is a fundamental feature of entrepreneurship*. People start ventures on the basis of optimism. They do not launch businesses on the as-

sumption that they will go bankrupt.

B. Economic Cause-and-Effect

In 1846, Frédéric Bastiat's book was published, *Economic Sophisms*. In Chapter 18, he wrote this memorable passage. It described the market-based coordination of the delivery of daily supplies to Parisians. "On coming to Paris for a visit, I said to myself: Here are a million human beings who would all die in a few days if supplies of all sorts did not flow into this great metropolis. It staggers the imagination to try to comprehend the vast multiplicity of objects that must pass through its gates tomorrow, if its inhabitants are to be preserved from the horrors of famine, insurrection, and pillage. And yet all are sleeping peacefully at this moment, without being disturbed for a single instant by the idea of so frightful a prospect. On the other hand, eighty departments have worked today, without co-operative planning or mutual arrangements, to keep Paris supplied. How does each succeeding day manage to bring to this gigantic market just what is necessary—neither too much nor too little? What, then, is the resourceful and secret power that governs the amazing regularity of such complicated movements, a regularity in which everyone has such implicit faith, although his prosperity and his very life depend upon it? That power is an absolute principle, the principle of free exchange." This is what Leonard Read called the miracle of the market. But it is not a miracle. It is the development of an ethically coherent order of economic cause-and-effect. At its center is the Trinitarian God, who is both one and many. His legal order establishes protections for property: ownership, which necessarily involves the right of disownership.

Having asked his question, Bastiat answered it. "That power is an *absolute principle*, the principle of free exchange. We put our faith in that inner light which Providence has placed in the hearts of all men, and to which has been entrusted the preservation and the unlimited improvement of our species, a light we term *self-interest*, which is so illuminating, so constant, and so penetrating, when it is left free of every hindrance." But free market economists refuse to invoke Providence, let alone God, in their intellectual defenses of self-interest. This puts them at a disadvantage when trying to persuade listeners.

The phenomenon that Bastiat described in 1846 was explained by F. A. Hayek in his 1937 essay, "Economics and Knowledge." He focused on knowledge, just as I do in this book. *Knowledge is decentralized and highly frag-*

mented, yet the economy runs coherently and efficiently. Why? How? He wrote this: ". . . economics has come nearer than any other social science to an answer to that central question of all social sciences: How can the combination of fragments of knowledge existing in different minds bring about results which, if they were to be brought about deliberately, would require a knowledge on the part of the directing mind which no single person can possess?" There is no directing mind, he assumed but politely refused to say. So do his academic peers. Instead of invoking God, Hayek invoked *spontaneity*—Kant's noumenal realm of scientific non-cause and non-effect. "To show that in this sense the spontaneous actions of individuals will, under conditions which we can define, bring about a distribution of resources which can be understood as if it were made according to a single plan, although nobody has planned it, seems to me indeed an answer to the problem which has sometimes been metaphorically described as that of the 'social mind.' But we must not be surprised that such claims have usually been rejected, since we have not based them on the right grounds." He thought that economic logic would someday provide these right grounds. But it has not. Most people still want to believe that society is governed by ethical coherence. They are correct. It is. But free market economists refuse to speak of God or Providence. Bastiat knew better.

Economic theory tells us that individual economic plans are reconciled by the free market's auction process. People need accurate information to construct profitable plans. They pursue their own ends, but they pursue them at a price. The free market's system of competitive bidding for scarce resources produces a constantly changing array of prices. Prices change as conditions change. These conditions involve an unimaginable number of changes. The price system of the free market conveys these changes in a condensed form: objective prices. Individuals who are making plans for their economic futures find that their plans are easier to devise and easier to follow if they successfully incorporate these prices into their plans. They will not fly completely blind. This is the argument that Ludwig von Mises offered in his 1920 essay, "Economic Calculation in a Socialist Commonwealth." The argument applies to central panning in a world without private property. But it also applies to individual planning. *Prices enable people to allocate their resources in terms of plans that may work out to their advantage.* Their plans may fail, but this will not be because they paid no attention at all to the economic facts conveyed by prices.

Prices do not provide explanations. Entrepreneurship involves making guesses about the objective causes of particular prices. But these guesses are bounded by prices. They are not wild guesses. They are guesses about causes and effects in a world of scarcity, especially a scarcity of accurate information.

Planners subjectively impute meaning to objective prices. This requires what economic theorists occasionally refer to: *intuition*. As in the case of spontaneity, intuition is another manifestation of Kant's noumenal realm. Economists prefer to avoid this explanation, but all of them have it in the backs of their minds. This word coveys an admission: "We don't know what it is. We cannot explain how it works. It operates in the realm of flux. But we know that someone who can convert bits and pieces of intuition into predictable processes can get rich. This is what successful entrepreneurs do." I discuss this in Appendix A.

I call this process of understanding *casuistry*. It is accomplished by imputation. Christian theology used to discuss casuistry. It involves applying permanent ethical rules to individual circumstances. I have explained this in terms of God's imputation, which is perfect and objective. Men are made in God's image. They possess this ability as finite creatures. They possess the ability to impute accurate meaning to the world around us. This world is coherent. Above all, it is ethically coherent. People make plans (point two) in terms of ethics (point three), which requires them to impute future economic value (point four).

C. Adjusting to Others

In a free market, each individual, whether acting as a consumer or as a producer, asserts his will by demonstrating his ability to pay for his plan in the marketplace. His performance is evaluated by the market by means of a system of profit-and-loss accounting. This is why people can work out their plans systematically. They can respond to changes in consumer demand. There is no single *earthly* unified plan. There is no single *earthly* planner present in the production process. On the contrary, the plans of acting individuals are very often in opposition to each other. Nevertheless, through the competitive action of the free market, the competing plans of each acting individual can be reconciled in a productive way.

When a buyer and a seller come together, they have different goals in mind. They have different plans. However, because they can bargain with

one another, and because each of them can search out someone else who may be able to substitute for the person in front of him, there is a possibility for the working together of these various plans.

Both a buyer and a seller want to make a deal. If they enter into a voluntary exchange, each person has done so expecting to be better off. They both expect to win. There is no "equality of exchange." Each one thinks he will be better off after the deal is completed.

Each market participant makes predictions about the economic future. These predictions may not come to pass. We are human; we do not know the future perfectly. One person may think that the price of an asset is going up in the near future, so he wants to buy now. Another person may think that the price of that asset is going down in the near future, so he wants to sell now. They can get together and make a transaction, each acting in terms of his best knowledge, and while one of them will be incorrect, at least for a time, the market still gets the benefit—price information—of the decisions of each of them. *The best information that specialists possess is brought to bear on the operations of a tiny segment of the market.*

Because of all these compacting plans and views of the future, the free market's profit-and-loss system encourages the efficient meshing of everyone's plans. This does not mean that everybody will be pleased with the results. People make mistakes. Some people lose money, while other people make money. Some people have their plans rewarded with profits, and other people have their plans rewarded with losses. The point is, *there is a continual process of rewards and punishments in the free market.* Good ideas or good plans, as judged by paying consumers, are rewarded with profits. Bad ideas or bad plans are penalized with losses. Therefore, throughout the day, or throughout the fiscal year, planners get feedback from the market. This feedback is from consumers. This tells producers whether or not they should pursue their present lines of production.

The free market is a self-regulating system for maintaining consumer authority, meaning the economic authority of the buyer, who possesses money: the most marketable commodity. This system of rewards by consumers is based on the moral principle of service to consumers. If consumers are not authoritative in the market, then some other administrative agency must issue plans to producers for the next month, year, or decade. If consumers do not rule as masters of the processes of production, then some other agency must do it. Specialized bureaucratic planners will issue direc-

tives to producers, and then later hold those producers accountable for everything that they have done with all the resources they have used.

There is no escape from planning. In a free market, there no escape from a system of information and incentives which pressures producers to judge their plans. The lure of profit and the fear of loss pressure these planners to revise their plans whenever their plans do not meet the demands of consumers. In contrast is a socialist system. There may not be any revision of plans until the economy crashes. Then leaders are forced to abandon the socialist system. This happened in Communist China in 1979 and Communist Russia in late 1991.

In a capitalist economy, consumers have a legal right to change their tastes. Producers must either conform to this shift in tastes or else suffer monetary losses. In a socialist economy, producers meet the plans of the planning agency, not the direct demands of consumers. They either conform to the requirements of the central planners, or else they are fired. Under Nazism and Communism, they could be executed. This is one way to reconcile plans. It leads to a production process motivated by the fear of not doing everything by the state's written plan. This leads to confusion and arbitrariness. It is not possible to write down all of the required responses to every conceivable change in the economy.

Conclusion

There is no escape from the responsibility of making economic plans. The future is uncertain. It is also inescapable. People have to make plans. Individuals must make these plans. They may make them exclusively on behalf of themselves. More commonly, they make them as trustees of others, most obviously their families. Even in a centrally planned economy, individuals make plans. Somebody is held legally responsible for the results of these plans.

In a society with a high division of labor, these plans must be made in terms of today's prices and expected future prices. The price system provides objective markers for decision-makers. These prices are the product of countless buyers and sellers who are acting in terms of the best plans they have and also in terms of the capital they own. Because people are self-interested, and because they do not want to make losses, they use the best information they possess when they make plans. But they may demonstrate poor judgment.

In a free market economy, the judges are future consumers. They will either buy or not buy the output of particular plans of production. Consumers act on behalf of themselves or those people for whom they are legally responsible. In a socialist economy, the judges are bureaucrats who possess the power to reward and punish. Bureaucrats are supposed to act on behalf of the people, but there is no cause-and-effect system of rewards and punishments that places final authority in the hands of the voters. Final institutional authority is in the hands of representatives of the highest offices of the state.

The market process is a way of reconciling the competing plans of producers and consumers. Producers have an economic incentive to adjust their plans to the money spent by potential buyers. This incentive is highly personal for producers. These people are legally responsible for the outcomes of their plans, and they are also economically responsible. *Private ownership establishes a legal connection between plans and economic results.* The free market establishes an economic connection between plans and economic results. In this way, the one and the many are bound together by the price system. The many plans of individuals are reconciled by the outcomes of competing bids: prices. There is no comparable means for reconciling plans in a socialist system. In a pure socialist system, there are no prices. There is no market process in which competing bidders can establish monetary prices. This produces blindness on the part of consumers and producers. This was the point made by Mises in his essay, "Economic Calculation in the Socialist Commonwealth." Central planners use coercion or the threat of coercion to reconcile the plans of producers and consumers. But they do so irrationally. Without prices, they are blind. They will lead the nation into a ditch.

Free market economists, especially those in the Austrian School tradition, make this argument without directly appealing to the God of the Bible. But to make this argument plausible, there has to be a system of civil law that protects the private property order. This civil law must be informed by a reliable system of ethics. *There has to be an ethical foundation for the legal system.* There also has to be a logically coherent relationship between ethics and predictable economic outcomes. If people do not believe that the legal system is just, they will not voluntarily cooperate with the state's law-enforcement agents apart from the threat of violence against them. They will not use self-government to avoid breaking the laws of the legal system, especially when they think it is in their self-interest economically to do so.

The predictability of the legal system steadily breaks down. The efficiency of the economic system breaks down with it.

Humanistic economists do not appeal to any system of law or ethics in their economic analyses. This is self-conscious on their part. They attempt to defend the efficiency of the free market process of exchange as an ethically and legally autonomous social arrangement. They face an enormous practical problem: gaining widespread support of the population for their system of economic causation. People want to believe that they can and will prosper by doing things the right way, but they also want to believe that in doing so, they are doing the right thing. Humanistic economists do not offer a cogent explanation for why the efficient market process is also morally just. They begin with the concept of value-free economics. This can lead logically to only one conclusion: a value-free social order with the free market economy serving as its foundation. But there is no such thing as a value-free social order. Most voters understand this and agree with it. They believe that they can safely ignore free market economists who come in the name of a metaphor: the invisible hand of the unfettered free market. Few people trust results of their economic decisions to a metaphor.

24

MONEY AND KNOWLEDGE

Then the Pharisees went and planned how they might entrap Jesus in his own talk. Then they sent to him their disciples, together with the Herodians. They said to Jesus, "Teacher, we know that you are truthful, and that you teach God's way in truth. You care for no one's opinion, and you do not show partiality between people. So tell us, what do you think? Is it lawful to pay taxes to Caesar or not?" But Jesus understood their wickedness and said, "Why are you testing me, you hypocrites? Show me the coin for the tax." Then they brought a denarius to him. Jesus said to them, "Whose image and name are these?" They said to him, "Caesar's." Then Jesus said to them, "Then give to Caesar the things that are Caesar's, and to God the things that are God's." When they heard it, they marveled. Then they left him and went away (Matthew 22:15–22).

Analysis

I have discussed this passage in detail in Chapter 44 of my commentary on Matthew. This exchange took place inside the temple (Matthew 21:23). The Pharisees were the experts in the Mosaic law and Talmudic law. The Herodians were Jews who had made their peace with Herod, a regional governor appointed by the Roman government. Herod's jurisdiction extended over Galilee, where Jesus' home was. Legally, Jesus was under Herod's authority. Herod had executed John the Baptist.

The Pharisees had a strategy. If they could persuade Jesus to answer a question publicly about the legitimacy of Roman taxation, they hoped to entrap Him. If He said that Roman taxation was legal, most Jews would resent it. They resented rule by Rome. So, they might turn against Jesus. On the other hand, if He came out in opposition to Roman taxation, the Roman government, administered locally by Pilate, might arrest Him as a revolutionary.

Jesus did not take the bait. He asked to see a coin. They brought Him a denarius. It was a small silver coin. On the front of the coin, there was an

inscription: Ti[berivs] Caesar Divi Avg[vsti] F[ilivs] Avgvstvs ("Caesar Augustus Tiberius, son of the Divine Augustus"). This was an affront to the Jews. Only God is divine. On the back, it declared: Pontif[ex] Maxim[us] ("Highest Priest"). There was an image of a female god on the back: Livia. She is sitting on a stool/throne. This declaration and the image also outraged them. God's only high priest was a Jewish male. The coin was used to collect poll taxes or head taxes. It was the main coin of the Roman Empire for half a millennium.

This raises a question: "Why did Jesus' critics have such a coin?" It was a tax coin. It was also religiously profane. It violated God's revelation of Himself. There was a pagan image on it. There were pagan inscriptions challenging the sovereignty of God and the authority of the high priest. It was clear why they had such a coin. First, they were under Rome's judicial authority. The Herodians were open about this. Second, it was the primary coin used in market exchanges. This coin was a symbol of the Roman empire, not just politically but also economically. Possessing these coins allowed citizens of Israel to participate in the largest free trade zone on earth. In Jesus' day, it was the largest in history. This made them richer than they would have been had they not been given access to this free trade zone.

This gigantic market promoted a high division of labor. Workers could specialize in production. Their specialization of production made them more efficient. They had specialized knowledge that gave them a competitive edge. Therefore, it made them richer as individuals. To participate in this market, the Jews had to do two things. First, they implicitly and operationally had to acknowledge the authority of Roman rule by using a tax coin. Second, they used it in trade—a business coin that announced the divinity of the Roman state. About 35 years later, they rebelled. This brought the wrath of the Roman state on Jerusalem. In A.D. 70, Roman troops burned down the temple in which Jesus had spoken, the temple that Herod's father had built. Also trapped in Jerusalem were the Edomites, the biological heirs of Esau, who were constantly at odds with the Jews. Herod was an Edomite. After A.D. 70, they disappeared as a people. There is no trace of them in subsequent historical records.

Jesus understood the importance of these small silver coins in Rome's economy. They made possible the vast trading empire which provided the wealth that maintained the army. The coin served as the unit of account for business. It was the primary means of exchange. This system of free pricing

made Romans rich by contemporary standards. The city of Rome had a million inhabitants in Jesus' day: gigantic. (In 800, Charlemagne's era, it was down to 50,000.) The coins represented the Roman state, but they also sustained the empire's economy. The Pharisees and the Herodians were active participants in the empire's system of political control and unprecedented wealth. He called them hypocrites. They had long since acknowledged that it was lawful to pay taxes to Caesar, using a pagan coin that was blasphemous.

He then announced this principle: "Render unto Caesar the things that are Caesar's, and unto God the things that are God's." This was an announcement of political submission. It meant submission to the Roman state, but it also meant benefitting economically from the free trade zone of the Empire. Money is the most marketable commodity. In Rome, this was the denarius, what we might call the "almighty denarius."

A. The Value of Knowledge

There is a legal principle establishing the connection between knowledge and responsibility. The person who has greater knowledge is assumed by a court to be more responsible than the person with less knowledge. This principle also applies to economic theory. The owner has an incentive to gain access to accurate knowledge about the market conditions affecting the prices of the assets he owns. This connection is established by the third law of covenantal economics: *people prefer more.* It is also a law of humanistic economics. If he wants more, he must pay a price: attention to detail regarding the markets for the assets.

Because of God's curse of the ground, scarcity is cursed in the post-fall world. This has made scarcity a burden. It was not a burden in the garden. It reminded man that he is finite. It was a restriction on his actions. He could not pursue his purposes at zero cost. He had to exchange one set of conditions for a new set. This is an inescapable component of human action.

1. The Crucial Resource

Economists should begin their analysis of the economics of ownership with this principle: *the key economic value of ownership is accurate knowledge of the alternative uses for the owned resource.* The owner of an asset is legally responsible before God and man for the use of the asset. Therefore, the owner has a responsibility before God, as a trustee and as a steward, to

allocate His resources so as to achieve the maximum rate of return. Jesus made it clear that the standard for evaluating the maximum rate of return is the kingdom of God (Matthew 6:33). [North, *Matthew*, ch. 15]

From an analytical standpoint, *specialized knowledge is the crucial scarce resource*. The book of Proverbs declares. "If you cry out for understanding and raise your voice for it, if you seek it like you would seek silver and search for understanding as you would seek hidden treasures. . . ." (Proverbs 2:3–4). "Acquire my instruction rather than silver; acquire knowledge rather than pure gold. For Wisdom is better than jewels; no treasure is equal to her" (Proverbs 8:10–11). "How much better it is to get wisdom than gold. To get understanding should be chosen more than silver" (Proverbs 16:16). [North, *Proverbs*, ch. 53] "There is gold and an abundance of costly stones, but lips of knowledge are a precious jewel" (Proverbs 20:15). Solomon also wrote this: "For wisdom provides protection as money can provide protection, but the advantage of knowledge is that wisdom gives life to whoever has it" (Ecclesiastes 7:12). [North, *Ecclesiastes*, ch. 23.] These passages remind us that men seek precious metals, but wisdom has greater value. In the modern economy, investors pay little attention to the precious metals. These markets are tiny. Investors pay for accurate knowledge, both in money and search costs.

The Bible teaches that men should not exclusively pursue the maximum monetary rate of return. The love of money is the root of all kinds of evil (I Timothy 6:10). Free-market economics does not say that men always seek to maximize their monetary income. Humanistic free-market economists insist that their economic analysis is value-free. Therefore, they say that an owner has purposes, and whatever maximizes his rate of return, however he evaluates this, is what he will pursue. Yet in a free market order, the almost universally agreed-upon goal among business ventures, entrepreneurs, salaried workers, and resource owners is this: *maximize monetary return*. Why is this? Because, in a society with a high division of labor, which is always a money-based economy, prices are monetary prices.

2. Prices Provide Information

In Chapter 2, I argued that the first economic law of Christian economics is this: *owners adopt purposes*. Most free-market economists accept the truth of this law. Ludwig von Mises developed his economic analysis with this principle, which he designated as an axiom. I argued in Chapter 2 that

the second economic law of Christian economics is this: *prices provide information*. By prices, I mean monetary prices. Money is the most marketable commodity, and therefore the possession of money maximizes the range of choices available to the owner. Money becomes a widely used mental tool for resource allocation. Prices are monetary prices. They are objective. Economists insist that people respond predictably to economic incentives. I agree. The third economic law of Christian economics is this: *people prefer more*. This is also a fundamental assumption of humanistic economics. Without this assumption, economic action would become unpredictable. There could not be economic theory. This assumption regarding incentives does not necessarily mean the pursuit of money. But monetary profit is the universally agreed-upon goal for market enterprises. Bookkeeping, especially double-entry bookkeeping, conveys accurate information regarding the success or failure of entrepreneurial ventures. The fourth economic law of Christian economics is this: *scarcity imposes costs*. God imposed cursed scarcity on Adam. One of the blessings of God in history is increased wealth (Deuteronomy 8:17–18). [North, *Deuteronomy*, ch. 22] Increased wealth reduces the negative sanction of cursed scarcity. The fifth economic law is this: *growth reduces scarcity*.

The economic value of accurate economic information is high because this information can be used to increase people's rate of return on their investments of both time and money. Modern economic theory recognizes that the person who possesses accurate knowledge of the economic future, and who then acts on this information in such a way that he minimizes his cost of production, will be successful in the marketplace. He will earn profits. This quest for monetary profits drives the free market social order. *Accurate knowledge of specific future market prices produces the highest rate of monetary return among all of the various means of production*. The search for accurate information at a below-market price is the primary driver of the market process. This is the essence of entrepreneurship.

Why do land, labor, and capital (the combination of land and labor) produce lower rates of return than accurate information about future market prices? Because there are well-organized and extremely broad markets for the purchase of these factors of production. The greater the division of labor in a society, the more accurate is the knowledge conveyed by the prices of these resources. There is competitive bidding for land. There are markets for land and land-based resources. The same is true of labor. It is diffi-

cult to buy low and then sell high. There are few zones of ignorance to exploit profitably. In sharp contrast, what cannot be purchased at a specific price in a competitive market is the unique ability to predict future market prices. There is no organized market for purchasing specific units of entrepreneurial ability. There are no such units. *Entrepreneurial ability is the supreme unknown economic factor of production*. It takes entrepreneurial ability of a high order to identify people who possess the entrepreneurial ability of predicting future prices, and then either hire them or else partner with them.

People who possess the ability to predict future market prices accurately prefer to invest in their own name and on their own behalf. They prefer not to share their knowledge with anyone else. They can profit from their knowledge directly. The commodity futures markets offer ways for people who believe they can predict future market prices to profit directly from their knowledge, and to do so on a highly leveraged basis. The better that people are at predicting future market prices, the less willing they are to lease their services or share them with anybody else. They prefer to capitalize their own unique skill. They seek ways not to share this information. They do not wish their brokers to know what they are doing. They have multiple brokers. They conceal the ownership of their accounts. The more invisible they are, the more profitable they can become.

B. The Origin of Money: A Just-So Story

What is a just-so story? Wikipedia explains**:** "In science and philosophy, a just-so story is an unverifiable narrative explanation for a cultural practice, a biological trait, or behavior of humans or other animals. The pejorative nature of the expression is an implicit criticism that reminds the hearer of the essentially fictional and unprovable nature of such an explanation."

We learn through narratives. This is true in every society. Parents teach their children to understand the world through the stories they tell. The Old Testament is mostly narratives.

There is a well-known narrative for the origin of money. Once upon a time, there were small households. There was a division of labor based on gender and age. Men hunted. Women reared children and made clothing out of animal skins. Women foraged for edible food. Later—twice upon a time—families banded with other families to trade. They were related biologically. They bartered. Most families had similar skills and tastes to what

other local families did, so exchange was based mainly on personal skills and age. These social units became tribes. Then, much later, a pair of traders discovered that they agreed on a single commodity for trading purposes. Trading with money was simpler to trade by exchanging this commodity for goods. A hunter did not have to spend time searching for someone who wanted to trade what he owned for what the hunter owned. Other producers joined this pair of traders. This was the birth of money. People began trading for money instead of goods and services. Money replaced barter in one region, and then universally.

This is a wonderful story. It is easy to remember. Sadly for the storytellers, there is no evidence for any such development. Archeologists cannot locate the remains of any society without money. *The use of money appears to be as ancient as the use of language*. There is no plausible narrative for the transition from grunting and pointing to languages with rules of grammar. But economists long ago made up a story to teach young adults who want to become economists. Newcomers are expected to believe the narrative before they are initiated into the tribe of "econs." This narrative is a required rite of passage. The problem is, most of the initiates believe that the narrative corresponds to actual historical events. There is no attempt by the elders of the tribe to educate them in economic history on this matter. The story is a convenient fiction that is widely believed. It is a just-so story. It is conjectural history that is taken seriously as real history. I wrote about this in 2012: "The Regression Theory as Conjectural History." It is a chapter in *Theory of Money and Fiduciary Media*.

The story could just as easily be the story of a king or tribal chief who designated a form of money as the only way to pay taxes. Those under him obeyed. This led to the use of money in exchange. It was not based on the market process. Another possibility: a high priest had a dream that told him to tell local smelters to start minting ingots that the people could bring to the priests, who would offer up these ingots as peace offerings to God.

This leaves us without a historically convincing narrative for the origin of money. We have all done quite well without a theory regarding the origin of language, but this is not true about money. We want to know how money works in the economy. Our intellectual future may depend on it. Our intellectual future does not depend on a theory of the origin of language. Also, our financial future may depend on our understanding of money. Our nation's central bank may inflate our nation's currency into oblivion. In con-

trast, there is no central bank of words that threatens to debase your language, thereby making social interaction difficult. We are not facing another tower of Babel event. On the contrary, we are moving toward digital face-to-face real-time translations: overcoming Babel's divisions.

C. A Hypothetical Narrative of the Future

It would be convenient to have a narrative about money if we are to understand money. So, I recommend that you create such a narrative. Do not make it a hypothetical narrative of the past. Make it a hypothetical narrative of the future. If you create it, you may remember it. You may even understand it. Begin right where you are. Instead of a narrative based on how money came into being, I suggest that you write a narrative about how it might disappear, and what the consequences would be if it did.

You function quite well day to day. You use money on a regular basis. If you live in a highly developed economy, you use mainly digital money. You buy and sell almost everything by means of digital transactions. Even if you live in an economically less developed economy, such as in a village, you may be reading this on a smartphone or other digital device. You bought it with money, probably digital money. You know what digital money is.

What would happen to you if the digital programs that the world's banks use to communicate with each other went down and stayed down for a year? You could not be paid with digital money or buy anything with it. What would your world be like? Use some creative imagination. Don't use abstract analysis. Write down what services you could no longer buy. Spend a few minutes. This is a mental exercise worth doing. Try it.

I must now use my imagination. What would happen to my city? Goods could not be delivered by trucks. The money system would not work. Businesses that had always sent in their trucks could not be paid electronically or by check. The banks would be closed. So, businesses would not send in the trucks. If you owned a fleet of trucks, would you let your drivers go into a city to be paid in currency? You might not see some of the drivers again. Also, criminals would know that drivers would be paid in currency. Would honest drivers take this assignment?

How would people buy food in stores? Urban food stores must be completely re-stocked every few days. No trucks would be coming in. How could shoppers buy food? They might have some paper currency. But, except for dealers in the illegal drug syndicate, most urban people do not have much

paper currency. There would soon be looting. The government would declare martial law. But how would the government buy the goods it needs to impose martial law? How would it pay the troops? How would the government collect taxes?

The division of labor would shrink dramatically and very fast. You might no longer be employable. No one could pay for your services. You would not be alone. Unemployment would be widespread. People would hoard paper money. New currencies would emerge. What would become money? Money is the most marketable commodity. What would be the most marketable commodity in a month? Three months? Six months?

Assuming that you could somehow maintain yourself and your family economically, how difficult would your life be? How many hours a week would you have to work? What goods would you have to give up? What services?

It is difficult to imagine the modern world if it lost digital currencies for a year. Most of our daily markers for decision-making would be gone in a few weeks. There would be new ones, but they would probably be local. Anyone who used them would be at risk of theft or murder.

Prices would soon be quoted in new kinds of currency. New currencies would replace the one used by your nation's banking system. There would be competition among alternative currencies: silver coins and gold coins, common caliber bullets, and tobacco. In the meantime, most people would be operationally blind about available supplies of and demand for everything. This would be the monetary equivalent of the tower of Babel narrative.

How soon would it be possible to fix the banks' computer programs? How would bankers pay for these services? With what? How long would it take to restore the world you had lost? Could government central planning agencies do this, nation by nation? How?

D. Money, Knowledge, and Continuity

Here is my conclusion. *The most important thing society would lose would be information about the terms of exchange.* The existing means of exchange would no longer function. There would be no publication of prices denominated in national currencies. We would lose this information. So would our neighbors. There would be an economic collapse. This would negatively affect *the one*: society. It would negatively affect *the many*: individuals. Some future imitator of Adam Smith might write a book with this title: *The Poverty of Nations.*

Money is the most marketable commodity. We learn early in adult life to estimate the prices we must pay to sustain our lifestyles. Most of our monthly expenses are familiar. We pay the same price every time we make a familiar purchase. We save money for less familiar purchases. If we are caught by surprise, we borrow money to make such an unavoidable purchase. Our monthly budgets remind us of the great continuity in our lives. We rarely think about this continuity. We would if we lost our jobs.

This continuity overwhelmingly is a *continuity of knowledge*. We give this fact little thought. People rarely do except in times of war, natural disasters, and personal catastrophes. We have continuity in our lives because we have money. We have it as individuals, families, and communities. *Money is the crucial institutional resource of social continuity.*

Legal systems do not change much, decade to decade. Neither do customs. It is difficult to imagine what might conceivably change them, other than a major war, a revolution, or a plague. There has only been one plague in the history of the West that produced this kind of social discontinuity: the bubonic/pneumonic plague of 1348–50, called the Black Death. It undermined late medieval society and helped launched the Renaissance. In comparison to the stability of law and custom, monetary disruptions are more familiar. They are easy to imagine. The non-Communist West above the equator has not experienced such an event since the joint hyperinflations in Germany, Austria, and Hungary from 1921–23. A century without such a disruption is a long time.

The continuity of money provides the continuity of prices. This continuity allows us to go about our daily lives in familiar ways. We do not have to re-think every purchase. Think about our lifestyles. They are dependent on stable money. Some people say that money has *intrinsic value*. This is a conceptual error. It is a remnant of the philosophy of realism. Money's value, as with all other forms of economic value, is subjectively imputed by individuals. But it is accurate to say that money has *historic value*. This is why it preserves continuity in our lives.

The historic value of money preserves the historic value of most of the things we purchase. Day to day, month to month, and even year to year, we do not perceive any new patterns in our purchases. We are unaware of such changes. This allows us to focus our attention on those few areas of our lives that are experiencing change or that may experience it in the near future. We allocate our scarce resource of planning time by focusing our attention on

these areas. We may have to make plans because of these changes. We would confront these kinds of discontinuities more often if it were not for money.

In economically underdeveloped societies that are based on much greater self-sufficiency, there is also continuity. Their rural lifestyles do not change much. But these are lifestyles based on low output, traditional production, and poverty. They are marked by a low division of labor. These rural communities are vulnerable to major discontinuities. Their income and lifestyles are dependent on local geography: the land. A flood, a drought, or an infestation of locusts can disrupt the plans of a large segment of the local population. Without money to spend to lure outsiders into the community bearing food and other necessities for sale, local residents are helpless. They may have to move. This certainly disrupts a family's lifestyle. The Irish potato famine from 1845–50 was such an event. A million people died. A million emigrated, mainly to England and the United States. On a much smaller scale, the migrations from the states of Texas, Oklahoma, and Kansas to California in the dust storms of the mid-1930s accomplished this. But these people had old automobiles to drive west a thousand miles. America's greatest humorist of the 1930s, Will Rogers, an Oklahoman, said this: "America is the first nation to go to the poorhouse in an automobile."

If a nation were to lose its money system for as long as a few months, decision-makers would be close to blind economically. Past prices would not convey the same accuracy of information. Continuity would be severed. With present prices disrupted, planning would be disrupted. *Money provides the landmarks of our daily lives: prices*. We pay little attention to them day to day. We do not think about the degree to which we owe our lives to money. Money provides us with the vast economic division of labor that feeds us, clothes us, and houses us. The division of economic labor makes possible the division of social labor we enjoy: the familiar landmarks of our culture.

So, there is stability in the lives of most urban people. Money provides it. Ours is not the stability of perpetual poverty. It is the stability of long-term economic growth. This growth is caused, above all, by the increasing division of labor. This is in turn funded by increased capital investment. *Modern capital formation would not be possible without money prices*. Economists and statisticians debate over the best way to sample the prices that are relevant to understand past economic growth. The public does not sense major changes except in times of war, revolution, and monetary inflation. Such events are rare.

E. Hayek on Dispersed Knowledge

In September 1945, Hayek's most important scholarly article was published in the *American Economic Review*. Its title: "The Use of Knowledge in Society." He had been Keynes' foremost critic in 1935, the year before the publication of Keynes' *General Theory*. He was now famous in the United States because of his non-technical book, *The Road to Serfdom* (1944), which had appeared as a condensed book in the mass circulation *Reader's Digest* in April 1945. [http://bit.ly/HayekRoad1945] This article was a challenge to the growing influence of Keynes, although it did not name him. For the next three decades, it fell on deaf ears within the economics guild. Only after he won the Nobel Prize in the fall of 1974 did it begin to receive serious attention outside of the then-tiny Austrian School movement.

1. The Conceptual Problem

His opening words set the agenda. "What is the problem we wish to solve when we try to construct a rational economic order? On certain familiar assumptions the answer is simple enough. *If* we possess all the relevant information, *if* we can start out from a given system of preferences, and *if* we command complete knowledge of available means, the problem which remains is purely one of logic. That is, the answer to the question of what is the best use of the available means is implicit in our assumptions." Then he wrote a sentence to placate his peers, invoking their jargon: "The conditions which the solution of this optimum problem must satisfy have been fully worked out and can be stated best in mathematical form: put at their briefest, they are that the marginal rates of substitution between any two commodities or factors must be the same in all their different uses." But humanistic economic theory remains unable to identify the "solution to this optimum problem." It cannot do so because, on the basis of purely subjective value, there is no way to identify any criterion for a social optimum. It is impossible to make scientific comparisons of subjective utility. His colleague at the London School of Economics, Lionel Robbins, who also was a disciple of Mises, proved this in 1932. Therefore, there is no solution to this problem by way of the marginal rates of substitution, which is jargon for "when you are offered a better deal, take it."

Hayek was invoking the chimera of *equilibrium*. But he knew that this concept assumes the omniscience of mankind, which is ludicrous. He had

made this connection clear in his 1937 essay, "Economics and Knowledge." He wrote: "The device generally adopted for this purpose is the assumption of a perfect market where every event becomes known instantaneously to every member. It is necessary to remember here that the perfect market which is required to satisfy the assumptions of equilibrium analysis must not be confined to the particular markets of all the individual commodities; the whole economic system must be assumed to be one perfect market in which everybody knows everything. The assumption of a perfect market, then, means nothing less than that all the members of the community even if they are not supposed to be strictly omniscient, are at least supposed to know automatically all that is relevant for their decisions."

So, how can we explain the coherence of the market order? By the market process, which is based on this rule: *high bid wins*. Here is Hayek's explanation.

2. Knowledge Is Dispersed

Knowledge is widely dispersed. "We need decentralization because only thus can we ensure that the knowledge of the particular circumstances of time and place will be promptly used. But the 'man on the spot' cannot decide solely on the basis of his limited but intimate knowledge of the facts of his immediate surroundings. There still remains the problem of communicating to him such further information as he needs to fit his decisions into the whole pattern of changes of the larger economic system."

Individuals have important bits of information that no one else possesses. These individuals own this information. They may be able to put this to productive use in their own lives by using it to meet the desires of paying customers. The customers benefit from this knowledge because it is packaged in such a way that they can put it to productive use. How is this dispersed knowledge organized in such a way that customers who are willing to pay for it are made aware of the opportunities? In other words, how is this seemingly infinite supply of dispersed information coordinated in such a way that society benefits? The answer is the price system. It is based on money. Specifically, people need to know the comparative cost of using scarce resources. The accent is on *comparative*.

> There is hardly anything that happens anywhere in the world that *might* not have an effect on the decision he ought to make. But he

> need not know of these events as such, nor of *all* their effects. It does not matter for him *why* at the particular moment more screws of one size than of another are wanted, *why* paper bags are more readily available than canvas bags, or *why* skilled labor, or particular machine tools, have for the moment become more difficult to obtain. All that is significant for him is *how much more or less difficult* to procure they have become compared with other things with which he is also concerned, or how much more or less urgently wanted are the alternative things he produces or uses. It is always a question of the relative importance of the particular things with which he is concerned, and the causes which alter their relative importance are of no interest to him beyond the effect on those concrete things of his own environment (Sect. V).

The crucially important information for decision-makers is the information conveyed by specific prices. A price is higher or lower than another price. A decision-maker can substitute one input for another. He makes this decision based on price.

> We must look at the price system as such a mechanism for communicating information if we want to understand its real function—a function which, of course, it fulfils less perfectly as prices grow more rigid. (Even when quoted prices have become quite rigid, however, the forces which would operate through changes in price still operate to a considerable extent through changes in the other terms of the contract.) The most significant fact about this system is the economy of knowledge with which it operates, or how little the individual participants need to know in order to be able to take the right action. In abbreviated form, by a kind of symbol, only the most essential information is passed on and passed on only to those concerned. It is more than a metaphor to describe the price system as a kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers, as an engineer might watch the hands of a few dials, in order to adjust their activities to changes of which they may never know more than is reflected in the price movement (Sect. VI).

This is the crucial function of money. The economy rests on knowledge. The free market system creates a system of incentives in which owners of knowledge that is relevant to others can profit from their information. They are therefore willing to supply this information at a price to those who are willing to pay for it. This is the system of coordination. Above all, it is a system of coordinating information.

3. Evolution vs. Creation

Hayek was a social evolutionist. In this, he self-consciously invoked the tradition of the late-eighteenth-century Scottish Enlightenment. He argued that the free market order was not designed. It was discovered.

> I have deliberately used the word "marvel" to shock the reader out of the complacency with which we often take the working of this mechanism for granted. I am convinced that if it were the result of deliberate human design, and if the people guided by the price changes understood that their decisions have significance far beyond their immediate aim, this mechanism would have been acclaimed as one of the greatest triumphs of the human mind. Its misfortune is the double one that it is not the product of human design and that the people guided by it usually do not know why they are made to do what they do. But those who clamor for "conscious direction"—and who cannot believe that anything which has evolved without design (and even without our understanding it) should solve problems which we should not be able to solve consciously—should remember this: The problem is precisely how to extend the span of our utilization of resources beyond the span of the control of any one mind; and therefore, how to dispense with the need of conscious control, and how to provide inducements which will make the individuals do the desirable things without anyone having to tell them what to do.
>
> The problem which we meet here is by no means peculiar to economics but arises in connection with nearly all truly social phenomena, with language and with most of our cultural inheritance, and constitutes really the central theoretical problem of all social science (Sect. VI).

Hayek was incorrect. The system was designed. It just was not designed by men. *The market's system of coordination was designed by God*. Not only was it designed by God, it was set into motion by the decree of God. It is the inevitable development of the private property system that God imposed in the garden. It is sustained, moment by moment, by the providence of God. It is not impersonal. *It is cosmically personal*. It is based on a judicial system of *delegated responsibility*: the dominion covenant. God has delegated the ownership of specific pieces of property to individuals and institutions. He has delegated responsibility along with this ownership. This *cosmic legal link between ownership and responsibility* is the heart of this process of coordination.

The price system, which is based on money, is at the heart of what Hayek called a mechanism. It is not a mechanism. A mechanism is lifeless. The market process is neither an organism nor a mechanism. *The free market is the social outcome of a series of contractual agreements within a covenantal legal framework that protects private ownership.* The process is personal, but it is not alive in the way that a biological organism is alive.

F. Money vs. Ignorance About the Future

People make profits by taking advantage of others' ignorance about the future. They specialize. They possess specialized knowledge that others do not. They can buy low and sell high because of others' ignorance.

Money is the most marketable commodity. It has the widest market. It buys anything offered for sale legally and even illegally. He who possesses money has the widest range of options. But this wide range comes at a price. Because knowledge about money is widespread, it is difficult to gain a competitive advantage based on the ownership of money. We do not buy money at a low price to sell it high later on. We plan to buy other things with it.

This means that we buy money whenever we are unsure about the future. Owning money is a way to protect ourselves from unforseen negative events. How? Because we have immediately marketable reserves. It is also a way to take advantage of unforseen opportunities. How? Because we have immediately marketable reserves. We do not expect to make money by owning money. We expect to make money, or not lose money, by using money to buy and sell other assets.

Money protects us from our ignorance of the future. But there is always a temptation to make money into an idol. We trust in money rather than

trusting God. We see money as our source of deliverance, not God. "The name of the Lord is a strong tower; the righteous person runs into it and is safe. The wealth of the rich is his fortified city and in his imagination it is like a high wall" (Proverbs 18:10–11). [North, *Proverbs*, ch. 54] We can lose money. We can also face crises that money cannot solve, such as a terminal disease. Money is not a reliable substitute for faith in God, but it is a widely trusted substitute.

A price today is the outcome of competition: buyers vs. buyers, sellers vs. sellers. These people have made exchanges in terms of their best knowledge. These were the highest bidders. Economists presume that these buyers were the best-informed bidders. They had sufficient money to be successful in the auction process. This leads economists to conclude that today's prices are based on the best available estimates of the future prices. The best information has been incorporated into today's price. If this is the case, then the next price will be random. New information or new assessments of existing information may change the next bid, either up or down, but from the point of view of prices today, there will be no trend. Some entrepreneur may correctly detect a trend, but this information is not widely known. He is not interested in sharing it. He wishes to buy low and sell high. New information affects prices so fast that humans are not able to assess it and act upon it. This theory of pricing, developed in the mid-1960s, has now been incorporated into the capital trading process. Algorithms make trades in milliseconds or less. The trading floors that were once filled with vocal professional bidders have been closed. Humans can no longer compete with computer programs.

Conclusion

A system of money is at the heart of every economy. Economists offer competing theories of money, but every theory of money places the price system at the heart of the market process. Without money prices, there is no market process. That was Mises' contention in his 1920 essay, "Economic Calculation in the Socialist Commonwealth."

In this chapter, I have focused on the connection between money and knowledge. Money is at the heart of the market's process of coordination, and *the most important economic asset that the market coordinates is knowledge*. If we do not understand this, we miss the central function of money.

Money is the outcome of a property system. There is a moral and judicial distinction between lawfully owned property and stolen property. Therefore, this is also true of money. In the next chapter, I discuss honest money. This is not how humanistic economists discuss money. They seek to maintain a delusion: value-free economic theory. But there are both honest money and dishonest money. They are not the same. They have different effects.

25

HONEST MONEY

Do not use false measures when measuring length, weight, or quantity. You must use just scales, just weights, a just ephah, and a just hin. I am the Lord your God, who brought you out of the land of Egypt (Leviticus 19:35–36).

Analysis

I have discussed this passage in Chapter 19 of my commentary on Leviticus. Leviticus 19 announces basic civil laws governing the economic sphere. "Do not steal. Do not lie. Do not deceive each other. Do not swear by my name falsely and profane the name of your God. I am the Lord" (vv. 11–12). It ends with the law governing weights and measures. This law became the touchstone for civil justice under the Mosaic law. (Note: a touchstone was a device for measuring the content gold of in an alloy.) Micah warned: "There is wealth in the houses of the wicked that is dishonest, and false measures that are abominable. Should I consider a person to be innocent if he uses fraudulent scales, with a bag of deceptive weights? The rich men are full of violence, the inhabitants have spoken lies, and their tongue in their mouth is deceitful. Therefore I will strike you with a terrible blow, and I will make you desolate because of your sins" (Micah 6:10–13). [North, *Prophets*, ch. 27] Ezekiel warned: "The Lord God says this: It is enough for you, princes of Israel! Remove violence and strife; do justice and righteousness! Quit your evictions of my people!—this is the Lord God's declaration. You must have accurate scales, accurate ephahs, and accurate baths!" (Ezekiel 45:9–10). The Western image of the blindfolded goddess of justice holding scales reflects this original imagery. But the God of the Bible is not blindfolded.

A monetary unit was a specific weight and fineness of a metal. Gold and silver were mixed with hardening metals of less value. For lower-value transactions, copper and bronze units were used. The market assessed the comparative value of these metals, as reflected in their prices. In this sense, they are not different from all other market commodities.

Honest money is governed by the general laws governing ownership. These included laws against tampering with weights and measures. One scale fits all. "You must not have in your bag different weights, a large and a small. You must not have in your house different measures, a large and a small. A perfect and just weight you must have; a perfect and just measure you must have, so that your days may be long in the land that the Lord your God is giving you" (Deuteronomy 25:13–15). [North, *Deuteronomy*, ch. 65]

Honest money was money that came into existence honestly. Money is unique among commodities because people seek to own it as a substitute for owning other assets. It can easily be exchanged for other assets. It is not held for its own sake, except by misers. Misers are rare. They are also widely recognized as deranged.

The Bible does not specify that the state should have a monopoly on money. The prophets indicated that there was a close connection between evil rulers and dishonest scales. Isaiah made this connection clear: "Your silver has become impure, your wine mixed with water. Your princes are rebels and companions of thieves; everyone loves bribes and runs after payoffs" (Isaiah 1:22–23). [North, *Prophets*, ch. 3] This does not necessarily mean that the state issued debased money. It does mean that the law against false weights and measures was not being enforced.

Gold and silver were exchanged in terms of weights. These weights were assumed to be of a fixed content of the precious money metal. Round coins did not come into use until about 600 B.C. in Asia Minor. Prior to this, metal bars were common. People made exchanges on the assumption that each bar had the same content of precious metal as all other bars of that size. This could be tested by scales. The scales measured both the commodity money and the commodity being sold.

Hebrew kings may have issued coinage, but there is no evidence of this. We know that smelters produced units that served as money. Smelters owned the metal they mined and turned into bars. They had the right to exchange these units for assets. Private ownership and the right of exchange led to the development of money metals, just as it led to other marketable commodities. The civil laws governing ownership governed the exchange of money. Money was not a separate legal category from the laws governing the protection of private property.

A. Honest Money Implies Honesty

Because of the nature of the economics profession—"guild" may be a better word—it is necessary to put quotation marks around the words, "honest money." Economists will go to almost any lengths to avoid the use of moral terms when they discuss economic issues. This has been true since the seventeenth century, when early mercantilistic pamphlet writers tried to avoid religious controversy by creating the illusion of moral and religious neutrality in their writings. This, they falsely imagined, would produce universal agreement, or at least more readily debatable disagreements, since "scientific" arguments are open to rational investigation. The history of both modern science and modern economics since the seventeenth century has demonstrated how thoroughly irreconcilable the scientists are, morality or no morality.

Nevertheless, traditions die hard. Economists insist that they do not inject questions of morality into their analyses. Economics is supposedly a "positive" science, one concerned strictly with questions of "if . . . then." If the government does A, then B is likely to result. If the government wants to achieve D, then it should adopt policy C. The economist is completely neutral, he insists. He is just an observer who deals with scarce means of achieving specific ends. The economist can therefore deal with "complete neutrality," with this sort of problem: "If the Nazis wish to exterminate unarmed citizens, which are the most cost-effective means?" No morality, you understand—just simple economic analysis.

The problem with the theory of neutral economics is that people are not neutral, the effects of government policies are not neutral, social systems are not neutral, and legal systems are not neutral. When pressed, even economists are not neutral. *Because God's law is not neutral, the costs of violating a society's first principles should be taken into account by policy-makers.* This includes economists. But no economist can do any more than guess about such costs. There is no scientific way to assess the true costs to society of having its political leaders defy fundamental biblical principles and adopt any given policy. If the economic advisors guess wrong—not an unlikely prospect, given the hypothetical moral vacuum in which economists officially operate—then the whole society will pay. (This assumes, of course, that policy-makers listen to economists.)

The inability of economists to make scientifically valid cost-benefit analyses of any and all policy matters is a kind of skeleton in the profession's

closet. The problem was debated back in the late 1930s, and a few economists still admit that it is a real theoretical problem, but very few think about it. Here is reality, according to methodological individualism (nominalism): *there is no measuring device for balancing total individual utility vs. total disutility for society as a whole*. You cannot, as a humanistic scientist, make interpersonal comparisons of subjective utility. Epistemologically sophisticated humanistic economists know this, but they prefer not to think about it. They want to give advice, but as scientists they cannot legitimately say which policy is better for society as a whole.

This is why politicians and policy-makers have to rely on intuition, just as the economists do. There is no scientific standard to tell them whether or not a particular policy should be imposed. Without a concept of morality—that some policy is morally superior to another—the economists' "if . . . then" procedure will not answer the questions that need to be answered. *Without moral guidelines, there is little hope of guessing correctly concerning the true costs and benefits to society as a whole of any policy*. The economist, as a humanistic scientist, is in no better position to make such estimations than anyone else. If anything, he is in a worse position, since his academic training has conditioned him to avoid mixing moral issues and economic analysis. He is not used to dealing with moral questions.

B. What Is Honest Money?

I wrote *Honest Money* in 1986. An updated edition was published by the Mises Institute in 2011. Honest money is a social institution that arises from honest dealings among acting individuals. Money is best defined as the most marketable commodity. I accept money in exchange for goods or services that I supply only because I have reason to suspect that someone else will do the same for me later on. If I begin to suspect that others will refuse to take my money in exchange for their goods and services in the future, I will be less willing to accept this depreciating money today. I may ask the buyer to pay me more, just to compensate me for my risk in holding that money over time.

A currency unit functions as money—a medium of *voluntary* exchange—only because people expect it to do so in the *future*. One reason why they expect a particular currency unit to be acceptable in the future is that it has been acceptable in the past. A monetary unit has to have *historic* value in most instances, if it is to function as money.

I have emphasized voluntary exchange. Any attempt by the state to create money, regulate money, or in any other way substitute its monopolistic power over the market's pricing process is an inherent move towards the assertion of state sovereignty over money. Money has nothing to do with sovereignty, except the sovereignty legally of anyone to produce coins or would-be money, and then to persuade others to accept this money in exchange. Whether or not a private form of money is accepted by others is a matter of voluntary exchange. The only aspect of money over which the state should have any authority has to do with the enforcement of contracts and honest weights and measures. The state has a legitimate right to impose negative sanctions against individuals who claim that a particular currency unit is backed by gold or silver of specific weight and fineness, when the coins do not conform to the claims of the issuing agency. But this fraud of misrepresentation is not unique to money. This has to do with the general prohibition against false weights and measures.

Private agencies should have the right to issue money. In the Bible, the first mention of privately issued money is the shekel of the sanctuary. "Then the Lord spoke to Moses, saying, 'When you take a census of the Israelites, then each person must give a ransom for his life to the Lord. You must do this after you count them, so that there will be no plague among them when you count them. Everyone who is counted in the census is to pay half a shekel of silver, according to the weight of the shekel of the sanctuary (a shekel is the same as twenty gerahs). This half shekel will be an offering to the Lord'" (Exodus 30:11–13). Clearly, this money was based on weight. It was based on a precious metal: silver. This was currency. It could be used, and it was used, to support the priests. This meant that the priests could spend this currency into circulation. The priests could buy goods and services for themselves and their families. There is no question that this was money. *The state had nothing to do with it.* The quality of the money would have been estimated by the priests who received the money.

The silver shekel was money. It served as money long before round tokens known as coins came into existence in Asia Minor about six centuries before the birth of Christ. The silver shekel was privately issued. It was not state-issued money. The state had no role in the production of money under the Mosaic law.

Even more relevant is this: the census was taken only prior to a holy war. This was not a tax imposed by the state. It was atonement money for the

blood that would be shed during the war. *This was ecclesiastical money.* It was not state money. Also, this was not a regular state census. There was no state census in Mosaic Israel. David sinned when he numbered the people of Israel when there was no prospect of any war (I Chronicles 21).

There is no indication in the Bible that the state ever issued money under the Mosaic law. State sovereignty, biblically speaking, is not justified when it comes to the issuing of money. The issuing of money by the state is an assertion of sovereignty that the Bible does not authorize for a biblically structured state. The state's assertion of such authority is an assertion of a wide-ranging sovereignty over the affairs of men. This was why the Pharisees attempted to trap Jesus by the use of a Roman coin that was used in taxation (Matthew 22:15–21). They fully understood that this coin was a political tool used by the Roman Empire for the suppression of political and religious movements that were not under the direct authority of the Roman state.

C. Non-Sovereign Money

Because state sovereignty has been associated with the issuing of money, which goes back to the issuing of coins in Asia minor, the public automatically assumes that state-issued money is the only legitimate form of money. There is nothing biblical about this attitude. In fact, the attitude is anti-biblical.

There is no need economically for the sovereignty associated with civil government to be associated with the issuing of money. It does not take the sovereignty of the state to make a particular form of money acceptable in society. Historically, this is best seen in the widespread use of the Spanish dollar, beginning around 1500. Spain was able to issue large quantities of these one-ounce coins because of the enormous inflow of silver bullion from its South American and Mexican mining operations. This coin, called a piece of eight, circulated throughout Western Europe. It was the primary form of money in the United States throughout the colonial period until 1857. Spain had no sovereignty in English-speaking North American colonies. It was a rival nation's currency. Yet its easily recognized coins functioned domestically as money because they were a universally acceptable currency unit in international trade. The government of Spain did not tamper with the quantity or fineness of silver in these coins throughout the entire period. These coins had greater historic value than any other form of currency in the West. No other currency unit in the history of the West has

had such widespread acceptability for as long a time. It had widespread acceptability precisely because it was not associated with state sovereignty outside of Spain and its colonies in the Western Hemisphere.

A similar function is provided by the paper currency of United States outside of the United States. Inside the United States, paper money is not used for most legal transactions greater than $20. Most people use credit cards and debit cards to conduct their economic affairs. The main use of paper money inside the United States is for illegal drugs imported by way of Mexico. This money flows through the Mexican drug cartels into the general economy of Mexico and other Latin American countries. The second most widespread use of paper dollars is paying immigrants, especially illegal immigrants from Third World countries in the Western Hemisphere, who work inexpensively "off the books." They mail a portion of their earnings to their families back home. This paper money circulates throughout Latin America as an alternative currency. Citizens trust these worn-out dollars more than they trust the currencies of their own nations. It is precisely because these dollars have no connection with political sovereignty in these foreign nations that the dollar functions as an alternative currency. Citizens do not trust their politicians to provide stable money.

D. Gold as Money

God created the private property order as His authorized social means of extending the dominion covenant in history. Individual and institutional owners represent God judicially (trusteeship) and economically (stewardship).

From the beginning, the Genesis narrative acknowledged the existence of gold. "A river went out of Eden to water the garden. From there it divided and became four rivers. The name of the first is Pishon. It is the one which flows throughout the whole land of Havilah, where there is gold. The gold of that land is good. There are also bdellium and the onyx stone" (Genesis 2: 10–12). Gold is the first mineral mentioned in the Bible. In Moses' day, gold was at the center of international trade.

Consider a man who owned land in Havilah. He came across evidence of gold flakes in a cave or along a riverbed. As the owner of the land, he was owner of the gold. He could have done several things to capitalize on his specialized knowledge. He could have patiently separated gold from the dirt. He could have accumulated containers of pure gold. He could have taken this to

an assayer: a buyer of gold. But what would he have received in exchange? What assets were of greater value in trade? So, more likely, he would have created gold ingots out of melted gold. He could have spent these as money for whatever he wanted to buy. He would have set up a small local mint.

Perhaps a larger regional mint would have offered him more commonly recognizable ingots. He would have taken a small discount on the gold he presented. This is called a seigniorage fee. He would have been buying tokens with a wider market by paying this fee. Perhaps there were rival mints offering tokens in exchange. Buyers competed against buyers.

Maybe one of the mints would have offered him ingots for ownership of his land. This would have taken uncertainty out of the picture for him: the life of the mine, the cost of defending his ownership claim, and the threat of thieves stealing his gold while transporting it to a mint. With every increase of a person's wealth there is an increase of responsibility. Some people prefer reducing their responsibility. As my friend, entrepreneur Jimmy Napier says: "When someone puts a million dollars in your hand, close your hand."

The mint would have made its profit by purchasing goods and services with its tokens. It would have spent these tokens into circulation. This is the great advantage of owning a gold mine. The gold is money. A person who owns a gold mine that is still profitable to operate has a stream of money. But mines can become unprofitable. Costs rise; output remains flat or falls. Owning a mine is not like owning a printing press. A counterfeiter can create money out of paper and ink. The supply of money produced by a gold mine is a tiny fraction of all the gold still being used as money. The output of a mine has little or no effect on prices. This is the greatest advantage of gold and silver as money: *it is expensive to produce more money*. This restricts the supply of new money coming into the economy.

Money has these characteristics:

Divisible

Portable

Recognizable

High exchange value to weight ratio

Stable exchange value over time

Gold and silver possess these characteristics. They have enjoyed the longest period of success of being used as money compared with all other commodities. Gold has these additional characteristics: (1) immunity to rust; (2) immunity to acids, other than aqua regia.

What is the morality of a gold coin standard? Simple: *it is the morality of a legal contract*. What about state-issued gold coin standard? A government's word is its bond. A government promises to restrain itself in the creation of money, in order to assure citizens that the monopoly of money-creation will not be abused by those holding the monopoly grant of power.

The case for a gold coin standard is the case against arbitrary civil government. While politicians may well resent "automatic pilots" in the sphere of monetary policy, if we had a more automatic pilot, we would have less intensive "boom-bust" cycles. When the "automatic pilot" is subject to tinkering by politicians or central bank officials, then it is no longer automatic.

The appeal of specie metals is not the lure of magical talismans, as some critics of gold seem to imply. Gold is not a barbarous relic. Gold is a metal which, over millennia, has become acceptable as a means of payment in a highly complex institutional arrangement: the monetary system. Gold was part of civilization's most important economic institution, the division-of-labor-based monetary system. Without this division of labor, which monetary calculation has made possible, most of the world's population would be dead within a year, and probably within a few weeks. The alternative to the free market social order is government tyranny, some military-based centralized allocation system. Any attempt by the state to alter men's voluntary decisions in the area of exchange, including their choice of exchange units, represents the true relic of barbarism, namely, the use of force to determine the outcome of men's decisions.

The gold coin standard offers men an alternative to the fiat money systems that have transferred massive monopolistic power to the civil government. The gold coin standard is not to be understood as a restraint on men's freedom, but just the opposite: a means of restraining that great enemy of freedom: the arbitrary state. A gold coin standard restores an element of impersonal predictability to voluntary exchange—impersonal in the limited sense of not being subject to the whims of any individual or group. This predictability helps to reduce the uncertainties of life, and therefore helps to reduce the costs of human action. The gold coin standard is not a zero-cost institution, but it has proven itself as an important means of reducing arbi-

trary government. It is an "automatic pilot" which the high-flying, loud-crashing political daredevils resent. This is a vote in its favor.

E. Value: Intrinsic vs. Historic

It has been common for defenders of the gold standard to speak of gold as possessing intrinsic value. This is a conceptual error. This error is a legacy of the implicit philosophical realism associated with pre-modern classical economic thought. Some classical economists believed in the labor theory of value. Others believed in the cost-of-production theory of value. Both of these concepts are incorrect. *Economic value is imputed subjectively by consumers*. Then they bid against each other in the marketplace to gain ownership or control of the highest valued goods and services in their subjective estimations.

Gold does not have intrinsic value. Neither does silver. What gold and silver have had historically is historic value. Whatever gold will buy today is closely related to what gold bought yesterday, last year, and perhaps a decade ago. The same is true of silver. These specie metals once circulated in the form of coins. People had the legal right to demand gold or silver coins from their banks. Under these circumstances, the public's knowledge of the value of gold and silver coins was considerable. Because of this, gold coins and silver coins circulated as money all over the world. A gold coin that was known to be of a particular quantity and fineness of gold that was issued by another nation's government-owned mint had almost identical value in exchange as a comparable coin issued by the domestic national mint. What mattered was the quantity and fineness of the gold, not the nation's stamp on the coins.

It is expensive to discover new mines, dig the gold out of existing mines, and smelt it into usable forms. This limits the supply of gold. Most of the gold ever dug out of the ground is in somebody's possession. So, the amount of new gold that is dug out of the mines each year is a tiny fraction of the total gold already in private hoards and in central bank vaults. The supply of gold is limited. Therefore, prices denominated in gold do not change much, year-to-year. If anything, the prices of goods and services in gold tend to decline slowly over time. There are few surprises with respect to the purchasing power of gold, and therefore gold has historic value. Its purchasing power is predictable. This is important for any form of money. There should be few surprises with respect to its purchasing power.

The stability of gold's purchasing power when it was a widespread form of currency was not based on any physical property of gold that was not also shared by silver. It had unique properties, but its main property was its scarcity. The same was true of silver.

F. Bimetallism and Gresham's Law

Because gold and silver are different metals, and because the economics of digging them out of the ground is not the same, there is no fixed ratio of prices between gold and silver. Silver is basically a byproduct of the mining of other metals: copper, lead, and zinc. Gold is a primary metal of high value, which is why gold mining companies invest so much money in digging deep holes in the ground to obtain it.

Historically, it was assumed that gold was about 15 times more valuable than silver. This has proven to be an inaccurate assessment in modern times. The ratio between the price of gold and the price of silver varies widely. Therefore, any attempt by governments to establish a legally fixed ratio between the price of gold and the price of silver is doomed to failure. It is just another price control. This system is known as bimetallism.

There is a famous law, known as Gresham's Law, that states the following: "Bad money drives good money out of circulation." It supposedly goes back to Sir Thomas Gresham, an advisor to Queen Elizabeth I in the 1560s. There is no evidence that he ever announced it. On the face of it, the statement seems to be wrong. In a free market, bad products do not drive good products out of the market. Why should anything like Gresham's Law be associated with two different forms of money? Why should bad money prevail in the marketplace?

The answer is this: *there is a government-enforced price control*. If, at any point in time, silver is more valuable in relation to gold than the official government price of silver says it is, well-informed people will hoard silver coins. They would rather spend gold coins, which are worth less in the marketplace that the government price control says they are. People may export the silver coins to a foreign country that does not honor the official price control in their own nation. It is not wise to pay more to buy something than you need to pay. So, you will spend the artificially overvalued currency, and you will hoard the artificially undervalued currency.

Under different economic conditions, the reverse can be true. The government may officially overvalue silver. Under these circumstances, gold

will go out of circulation, and silver will be used to conduct exchanges. Thus, Gresham's Law should be modified: "The artificially overvalued money drives out of circulation the artificially undervalued money." This does not have the same rhetorical power as the older law, but it is accurate.

This specific monetary analysis is an application of the economics of price controls. A price ceiling creates shortages: lots of buyers at a bargain official price, but not enough suppliers willing to sell. A price floor creates gluts: lots of sellers at a profitable official price, but too few buyers willing to pay it. If the government says that gold is more valuable in the marketplace than it really is, then it pays people to go down to their banks or to the government mint and exchange the artificially overvalued gold coins for the artificially undervalued silver coins. If gold is really worth less in the marketplace than the official price declares, then it pays to take in gold coins and exchange them at the artificial rate for silver coins. Take the silver coins, and go into the marketplace to buy even more gold coins at a bargain price. Repeat the exchange. Eventually, the government mint will run out of silver coins. This is the effect of bimetallism.

The solution is freely fluctuating exchange rates between gold and silver coins. The market sets the exchange rate. Under these conditions, both gold and silver will circulate widely in society. For smaller purchases, silver would probably be more likely to be used. Gold coins would be used for purchasing large quantities of raw materials or capital goods.

This would be a free market monetary system. This would be the auction process at work. A nation would not be on a gold standard or a silver standard. The market would determine which form of coinage would be used in particular circumstances. There would be considerable predictability between the exchange rates of the two forms of domestic money. The government could insist on tax payments in gold coins or receipts for gold coins. People would have to pay their taxes by exchanging silver coins for gold coins.

G. Steadily Falling Prices

If the money supply remains almost constant, and if capitalist production continues to increase the number of goods and services available to the public, then the competition of sellers against sellers will lead to either improvements in quality or lower prices or both. Sellers need to find buyers for their output. If this output is increasing every year, then the main way for all sellers to sell the output of their production processes is to lower their pric-

es. This has been the tendency of the free market system ever since 1800 in the West. The constant increase in per capita output of the manufacturing system has led to increased competition among sellers to gain buyers for this output. Price competition has been fundamental to the marketing strategy of Western capitalism. This is based on this economic law: *when the price falls, more is demanded*. Put differently, if sellers want more to be demanded, they must reduce their prices.

Sometimes, this across-the-board reduction of prices is called deflation. This is incorrect. Deflation should be defined as a decline in the money supply. It may produce falling prices, but it may not. *Price deflation* is what we find in a productive capitalist system in which the money supply is kept relatively constant. It usually is a slow process. People do not perceive that it is taking place.

There has been a huge exception to the slow-but-sure nature of price deflation: the cost of information transmission. Here, the rate is rapid and sure. The cost of transporting information has been falling steadily ever since the invention of the commercial telegraph in 1844. Card punch tabulation machines were used in the 1890 census in the United States. These became the basis of early computer technology. After 1960, the development of hard disk drives dramatically lowered data storage costs. This was the result of dramatically increasing the efficiency of digital storage devices. The Internet has accelerated this process: cloud computing. The constant pressure of the increased efficiency of these technologies has produced constant pressures to cut the prices of data storage.

The public now expects steady improvement of digital devices for the same monetary price. Sellers must offer these improvements or else face bankruptcy. This is a form of price deflation. Devices will sell for lower prices a year or two later. This process is accelerating as digital technologies make recent innovations obsolete. This is new in human history. To use an ancient metaphor, the technological genie is out of the bottle. It was free market capitalism that uncorked this genie around 1800 in Great Britain and English-speaking North America.

It is a serious mistake for anyone to argue that there is not enough gold or silver in the world to facilitate trade. Such an argument always rests on an unstated assumption, namely, that the price level should be fixed. Whatever it is today should be the case tomorrow, next year, and in 50 years. There is no such price stability in a free society.

Gold and silver can be traded in tiny quantities by means of electronic exchange. The digits can refer to specific quantities of gold and silver of a particular fineness. Most people would not buy and sell goods and services in exchange for coins made out of gold or silver. They would exchange them as they exchange digital money. Prices denominated in gold and silver would fall over time, corresponding to increased quantities of goods and services being offered for sale.

Conclusion

The specific legal arrangements that establish honest money are applications of the general legal arrangements that establish honest trade: honest weights and measures. These definitions can and should be established by the civil government, which has the responsibility of publishing these definitions and then enforcing them. A unit of weight has a name. Any seller who invokes this name in making a sale must be able to prove to a law-enforcement agent that the weights on his scales are the same as the state's criteria. The buyer can have confidence that he is not being cheated.

There is no biblical case for state-issued money. There is no biblical case for the concept of state sovereignty over money. Again and again, politicians have cheated the public. They had promised to provide stable currency, but they fail to do so. There have been two main exceptions in history: the gold coins issued by the Byzantine Empire from 312 until 1025. The other case was the Spanish silver dollar. The first of these coins were minted by Castille in the mid-fourteenth century. They remained relatively stable in silver content until 1868, when they ceased to be issued.

Who is best equipped to police the issuing of precious metal coins? Answer: experts within the precious metals industry who compete against each other. Competitors in every industry have an incentive to do their own policing. If they can prove that some seller is using weights when he buys that are different from the ones he uses when he sells, they can go to the authorities with this evidence. The authorities would then make the seller pay restitution to his victims. This would open the seller to huge losses.

This pricing process applies to the money metals. This is why money has so often been commodity-based money. There may be other forms of money, meaning notational money, but always notational money and commodity money serve as equivalents of money. If notational money increases in supply, but commodity money does not, the price of commodity money will

rise in relation to notational money. It will take more units of the notational money to buy a unit of commodity money.

This is why counterfeiters seek ways of deceiving the public. They seek to persuade sellers of scarce resources to exchange them for resources that appear to be scarce, but which in fact are far less scarce because of the counterfeiters' expertise in producing monetary units that appear to be real. This is theft through fraud. This is dishonest money.

Throughout history, the most consistent counterfeiters have been civil governments. They declare a monopoly over the production of money. Then, over time, they debase the money. This is taxation by inflation. I discuss this in the next chapter.

26

STATE-ISSUED MONEY

How the faithful city has become a prostitute! She who was full of justice—she was full of righteousness, but now she is full of murderers. Your silver has become impure, your wine mixed with water. Your princes are rebels and companions of thieves; everyone loves bribes and runs after payoffs (Isaiah 1:21–23).

Analysis

I have analyzed this passage in Chapter 3 of my commentary on the prophets. The prophet Isaiah's ministry began around 740 B.C. He was preaching to the priestly city of Jerusalem. The nation had been split into two kingdoms in the brief reign of Rehoboam, the son of Solomon, two centuries earlier. The northern kingdom fell to Assyria in 722 B.C. The southern kingdom did not fall to Babylon until 587 B.C. So, Isaiah's warning fell on deaf ears. Despite the fact that God brought an end to the northen kingdom within two decades of Isaiah's initial warning, there was no long-term repentance in the southern kingdom.

The three sins listed in this passage indicated that they were related ethically. First, there was no justice enforced by the civil government. Second, there was monetary debasement. Silver ingots were being debased by smelters who added cheaper "base" metals. This enabled the smelters of silver ingots to issue more of them than before. They looked the same, but they had less valuable metal than before. This was fraudulent. Other sellers understood that they were being defrauded by smelters, so they retaliated by lowering the quality of the goods they sold to smelters. The winemakers mixed in more water. Third, princes were companions of thieves. Everyone in power wanted a bribe to render judgment for or against someone. This violated the Mosaic law. "Never take a bribe, for a bribe blinds those who see, and perverts honest people's words" (Exodus 23:8). [North, *Exodus*, ch. 52] Bribery had become the way of life for the rulers in the southern kingdom.

Isaiah used the language of smelting to describe God's coming wrath. "Therefore this is the declaration of the Lord God of hosts, the Mighty One of Israel: 'Woe to them! I will take vengeance against my adversaries, and avenge myself against my enemies; I will turn my hand against you, refine away your dross as with lye, and take away all your dross'" (vv. 24–25). His use of *dross* here was spiritual. It was a metaphor. But the metaphor had to relate to actual practices. If the city's silver was not debased, then his covenant lawsuit against them made no sense. The metaphor was effective only because the residents of Jerusalem were well aware of the monetary debasement that was going on. This debasement was creating parallel debasements in product quality.

This was a violation of the law governing honest weights and measures. The definitions of weights and measures that had prevailed before the nation's spiritual debasement were not being enforced. This means that the civil government was ignoring widespread deception. It no longer protected common citizens. This was Isaiah's general accusation.

A smelter mixed molten silver with a small molten quantity of a less valuable but hard metal. This way, the ingot would remain in use longer. Pure silver is soft. Pure silver ingots would suffer a wearing away of silver. Older ingots would sell at a discount. The average user would not know how much a pure ingot weighed. So, smelters have always added a small quantity of a cheaper hard metal. In the case of ingots, the look and feel of newer ingots are the same as older ones.

Over time, people would have known what to expect from a particular smelter's ingots. These ingots would have historic value. They would be readily recognized. Rival smelters would have wanted similar acceptability for their ingots. They would have imitated the ratio of precious metal to base metal.

For any smelter to have increased the ratio of base metal to precious metal would have placed him at risk. Either the public would have demanded a discount when using his ingots or else a competitor would have warned the authorities. But this process of self-policing within the smelters' guild no longer worked in the southern kingdom. *The guild's members were in collusion.* They all debased their ingots at the same ratio. They were paying bribes to the civil government not to enforce the traditional definitions.

The historic value of the ingots was being undermined. The new ingots looked like the old ones, but this was an illusion. The total value of their

twin alloys had declined. It would have taken time for the public to detect a small change in the ratio. The silver ingots still would have looked the same. The smelters would have been able to buy goods today at yesterday's lower prices. They would have benefitted as consumers. The sellers would not have perceived the change immediately.

There were limits to this practice. At some point, sellers of goods would have noticed the changes. Then they would have demanded more ingots per sale. *This is why monetary inflation produces price inflation.* But if the civil government refused to take action against this deliberate tampering with traditional measures, meaning the ratio between silver and the base metal, then sellers of other products would have sought similar arrangements with the corrupt rulers. They also decided to tamper with traditional measures in their associations of producers.

This was spiritual corruption. The religious leaders did not call the civil leaders to account. Yet this was the city of the temple. At the top, it was judicial corruption. In between, it was business corruption. The value of the nation's goods was being reduced, yet the original product names still applied. This was a debasement of language. It was a debasement of the Mosaic law. Isaiah saw this. As a prophet, he brought a covenant lawsuit against the entire nation. This was the calling of every prophet. God raised up prophets when the priests were silent in the face of systematic corruption.

A. Something for Nothing

From the forbidden tree to the latest marketing deception, people have sought something for nothing.

Theft means attaining something for nothing. The victim has received nothing to compensate him for his loss. It is pure gain for the thief, pure loss for the victim. This is not a lawful market transaction. It is universally illegal. There is risk of being caught, tried, and convicted (Exodus 22:1–4). [North, *Exodus*, ch. 43]

The more common form of this sinful impulse is to buy something in exchange for something with less market value. If the thief can persuade the victim to make the exchange on the basis of false claims regarding the asset the thief is offering, the victim may decide to make the exchange. This is the impulse to gain ownership of something valuable at a price lower than the owner is willing to accept. The thief uses deception to persuade the owner that he is offering the owner something with a higher market value than a

comparable item possesses. The owner makes the exchange, but then discovers that the asset that he has received is worth less in the marketplace than competing items of the same (low) quality. The seller used fraud to gain whatever he desired. He deliberately misled the buyer. He received something (a desirable asset) in exchange for something less valuable, plus fraud. It was not a pure loss for the buyer/victim, and it was not a pure gain for the seller/thief. But it is a little bit of something for nothing like what was promised.

Wherever such transactions are widespread, trust is limited. The circle of people within which people voluntarily trade is small. The division of labor is minimal. Specialization of production is minimal. Output per unit of resource input is minimal. People are poor. Until they can find trustworthy people to trade with, they will remain poor.

A way to extend the circle of reliable trading partners is with a common currency. A currency unit has gained the reputation of stable value over time and across borders. The smelter has maintained a stable mixture of gold or silver plus a harder base metal. The currency brings traders together.

Whenever the civil government asserts a monopoly over the minting of money, the monetary unit spreads across the state's geographical jurisdiction. This strengthens the power of the state. But there is always a temptation for a future ruler to debase the currency. The inflating state buys goods, pays troops, and increases consumption, but it does so with money of depreciating value. The state wants something for nothing. It wants to consume, but it does not want to create a tax revolt by raising visible taxes. But the inflating state then finds that sellers raise prices. This reduces the state's ability to obtain wealth from the population.

With the invention of coins in Lydia around 600 B.C., state-issued currency became common in the Middle East. The Greek city-states had their own coins. But as each city-state fell, a new coinage system replaced it.

There is nothing in economic theory that links money to state sovereignty. Money is a means of voluntary exchange. As long as producers of coins declare the ratio of precious metal to base metal, they should be allowed to offer their coins for sale. But this would mean establishing enforceable ownership of the design of the competing products. It would be a crime for a competitor to place the same mark on coins with more base metals in the mix: a trademark violation. It would be equally criminal for the producer to misinform the users.

From the days of Abraham, traders developed the use of touchstones by which gold purity could be tested. They protected themselves from fraud. Monetary units traded in proportion to the gold content of the ingots. It was not easy for a mint to debase its coinage and reap benefits. It was only with the advent of empire-based money that the desire to gain something for nothing became widespread. The Roman Empire's coinage steadily depreciated after A.D. 200. The emperors could not afford to pay their troops with stable coinage.

B. Inflation: An Invisible Tax

A government expands the money supply in order to finance its deficits, or create a temporary economic boom, or fight a war, but then the prices for goods and services rise. Everyone in the "great auction" has more money to use in the bidding process, so prices rise. Then the public gets suspicious about the future value of money because they have seen the loss of purchasing power in the past. Sellers demand higher prices. Then the central bank is encouraged by politicians to accommodate the price inflation in order to keep the boom going (to keep the "auction" lively). The currency unit loses value because it has lost its historic value, which encourages people to discount sharply its future value.

The secret of retaining the public's confidence in any currency unit is simple enough: convince users of the money that the issuers are responsible, reliable, and trustworthy. Government and its licensed agents (banks) have a monopoly of money creation. Private competitors are called counterfeiters. Sadly, in our day, it is very difficult to understand just what it is that counterfeiters do, economically speaking, that governments are not already doing. Fiat money is fiat money. (Perhaps the real legal issue ought to be the illegal use of the government's trademark. Trademark infringement makes a much more logical case for government prosecution than counterfeiting.)

The question that policy-makers should ask themselves is this: "To avoid the necessity of imposing a totally new currency unit on a population, what can be done to convince people that the future usefulness of the currency in voluntary exchange will remain high?" Then they should ask this: "What can be done to improve the historic value of money in the future?" In other words, when people in a year or a decade look back at the performance of their nation's currency unit, will they say this to themselves? "The money that I'm holding today buys pretty much what it bought back then. I think

it's safe for me to continue to accept money in exchange for my goods and services, since people trust its buying power. I have no reason to believe that its purchasing power will fall in the future, so I can take the risk of accepting payment in this monetary unit today." If people do not say this to themselves, then the money's purchasing power is undermined. People will demand more money. Prices will go up, if they suspect that prices will go up. This, in turn, convinces more people that the historic value of their money has been unreliable, which then leads to higher prices.

Very rarely, a national government imposes a new currency unit on its citizens, and sometimes this works. One example is the introduction of the new German mark in November of 1923, which was exchanged for the old mark at a trillion to one. But normally the costs are so high in having people rethink and relearn a new currency unit that governments avoid such an imposition. Governments do this only after several years of hyperinflation in which the government's own policies destroyed the purchasing power of the currency unit. At that point, the governments remove lots of zeros from their paper currencies. They can steal no more wealth from the public with the old currency, so they create a new currency.

C. The Solidus: A Stable Gold Currency

The longest period of stable money in the history of man began with Constantine's rule in what became the Byzantine Empire. This was the Eastern Roman Empire. He began issuing a gold coin, the solidus, in A.D. 312. For the next seven centuries, his successors did not tamper with the gold content of these coins. The coins became widely used. There was a reduction in gold content around 1025. The new coins had more silver. After that, there were further reductions until 1092, when a new coin, 85% gold, replaced the solidus, the hyperpyron nomisma. It became the empire's main coinage for trade until 1204, when the crusaders captured Constantinople.

In a 1972 article in *The Freeman,* historian Charles Weber describes the dominance of the solidus coin in commerce.

> During this very long period the solidus had little competition in the world except for the gold of the Islamic dynasties which originally started as imitations of the Byzantine solidus during the seventh century. The Ostrogoths in Italy also imitated the solidus in great quantities during the fifth and sixth centuries, but unlike

> the Islamic imitations, the Ostrogothic solidi bore the name and portraits of the Byzantine emperor and can be distinguished from the Byzantine pieces only by subtle stylistic differences. So familiar was the world with the solidus that we seldom find specimens with cuts to test the authenticity of the pieces; forgeries of them were evidently rare. Hoards of them have been found as far away as Scandinavia. Although we have no exact mint records from the Byzantine Empire, the mintage of the solidus was certainly enormous. As late as about 1950, common, worn solidi could be had for as little as about $12., not much more than twice their bullion value.

This system of stable money was one of the great gifts of Christianity to the world.

D. Paper Money

The first experiment in paper money was in China, beginning around A.D. 1000. The Chinese did not suffer from massive inflation. But, beginning around 1260, the victorious Mongol Empire began to use paper money. This was the yuan dynasty. The government inflated. There was a currency reform in 1272. The old paper money bills were exchanged at a ratio of 5 to 1. In 1309, there was another conversion. During that half-century, paper money had depreciated by 1000 percent. This was mass inflation.

The problem with paper money, whether unbacked fiat money or backed by gold or silver, is this: *one bill cannot be distinguished from another.* They all look the same. With a coin, there are ways of testing metal content. This is not the case with paper money. So, people have to trust the issuing government not to mass inflate the currency. In China before the Mongols, the governments and banks were generally reliable. The Mongols began inflating as soon as they took over.

In a free banking system, there are few government regulations. There is open entry for new banks. There are no legal reserve requirements. Enforcement is left to the market process. Bankers are suspicious of other bankers. If a bank's notes come under suspicion, rival bankers can demand payment in silver coins or gold coins. This places a limit on the expansion of paper money notes. But when the government inflates, the general public has to serve as the policing agency. The government will not police itself. If the paper

money is convertible into gold or silver coins, the public can go to their banks, hand over paper money, and walk away with precious metal coins. Convertibility into gold coins on demand is the primary means of restricting the issue of paper money. The inflating government either has to stop inflating the currency or else it has to declare a pure unbacked currency.

If the government declares that the currency is no longer backed by gold or silver, then the public can be confident that an era of monetary inflation is about to begin. That was the case in Western Europe after August 1914. The nations ceased honoring their contracts to redeem paper money in gold or silver coins. The next major period of monetary inflation in the West was during World War II. Finally, in the United States, monetary inflation expanded after President Nixon unilaterally abolished the last remaining trace of the international gold standard on August 15, 1971. The American public had not been able to exercise restraints on the government's expansion of money ever since March 6, 1933, when President Franklin Roosevelt made it illegal for Americans to own gold. Both presidents unilaterally abolished the gold standard of their day. Congress did not debate the issue.

Paper money became an important factor in various national economies after the development of banking. Banknotes were paper money, but they were under restraints by the threat of bank runs. From the fourteenth century onward, this was a threat to the West's banks. By 1900, checks drawn on commercial banks were far more important in business and commercial transactions than paper money was. Checks, not banknotes, were the main form of money in large transactions. Digital money began to replace bank checks in the final third of the twentieth century in the West.

E. A Revocable Gold Standard

There were gold coins issued by the Holy Roman Empire as early as 1400. They did not circulate widely. The Spanish government issued the gold doubloon beginning in 1537. France issued the Louis d'or in 1640. This ended in 1792, the year before Louis XVI was executed. France issued gold coins from 1803 until 1914. The British issued the gold guinea from 1663 to 1814. Britain established a new gold standard in 1821. It introduced the gold sovereign. The United States began minting gold coins in 1795. It was only in 1857 that U.S. gold and silver coins became exclusive. The newly united Germany began issuing a gold mark in 1873. Coins were exchanged in terms of their

gold content. This established fixed exchange rates. These were the outcome of voluntary exchange, not government fiat, i.e., exchange controls.

1. A Century of Gold

After the defeat of Napoleon in 1815, Western European governments began to move back to a gold coin standard. From then until shortly after the outbreak of World War I in August 1914, international trade benefitted from the extension of the gold coin standard throughout Europe and the Western Hemisphere. Gold redemption was abolished in the United States with the outbreak of the Civil War in the spring of 1861. Gold redemption was suspended late in 1861. A full gold coin standard was not reestablished until 1879. But the triumph of gold in the nineteenth century stands as a testimony to the effectiveness of a gold coin standard in restraining the expansion of central governments and in extending the division of labor across national borders.

All of this ended with the outbreak of World War I. Richer members of the public had deposited their gold coins in local commercial banks. The governments allowed the banks to renege on their contracts. Banks refused to redeem paper money with gold coins. Then the governments and their central banks confiscated the gold that was in the vaults of the commercial banks. The governments used gold to purchase goods from outside the war zone, especially from the United States. This transfer of gold from the general public to continental European governments remained permanent. The gold standard was briefly restored in Great Britain from 1925 to 1931, but then Britain permanently went off the gold standard. Citizens could no longer demand gold in exchange for pounds sterling. The United States went off the gold coin standard at 1 AM, March 6, 1933, when President Franklin Roosevelt's unilateral executive order made it illegal for Americans to own gold bullion in any form. On August 15, 1971, President Richard Nixon unilaterally abolished the 1944 Bretton Woods international agreement by refusing to honor the redemption of gold by foreign governments at $35 an ounce or any price. These events show that a gold standard that is guaranteed by the government is a *government promise standard*. It lasts only for as long as it convenient for politicians to restrain the expansion of the money supply. Once abolished, the gold standard is rarely restored. The case of Great Britain in the second half of the 1920s is the one exception. It did not last long. There was no one to guard the guardian.

When the state places its stamp on either a gold or silver coin, this appears to create a guarantee for the reliability of the currency. At least initially, people under the jurisdiction of a particular civil government trust the decisions of government policy-makers. The legitimacy that is subjectively imputed by citizens to the civil government is indirectly transferred to the coins that bear the stamp of the government. This makes it easier for the government to persuade individuals under its jurisdiction to accept coins in exchange for goods and services. When the coins become widely circulated in commerce, this increases the division of labor.

The state appears to be offering an important service free of charge. It supervises the issuing of currency. It collects the gold or silver, plus the base metals that will be used to harden the specie metals so they can be used as coins. The mint then releases the coins by handing them over to the government, which the government then spends into circulation.

The problem with this arrangement is the ancient one that is expressed by a question: "Who guards the guardians?"

2. Who Guards the Guardians?

There is an ancient question that every society must answer: "Who guards the guardians?" Or in more contemporary usage, "Who referees the referees?" The public needs an unbiased guardian to restrain the actions of those who hold a legal monopoly of money creation: the government.

The government can always change the law. Governments do this all the time. Under a government-enforced gold standard, whenever there is a major war, for example, governments used to suspend specie payments by banks. They also suspended civil liberties, and for the same reason: to increase the power of the state at the expense of the citizens. Post-war governments are frequently unwilling to reestablish pre-war taxes, pre-war civil liberties, and pre-war convertibility of currencies, long after the war is over. Civil libertarians have not generally understood the case for a gold standard as a case for civil liberties, despite the obvious historical correlation between wartime suspension of civil liberties and wartime suspension of specie payments.

When the authorities declare the convertibility of paper into specie metals "null and void," it sends the public a message. "Attention! This is your government speaking. We are no longer willing to subject ourselves to your continual interference in our affairs. We no longer will tolerate restrictions on our efforts to guard the public welfare, especially from the public. There-

fore, we are suspending the following civil right: the public's legal right to call our bluff when we guarantee convertibility of our currency into gold coins. This should not be interpreted as an immoral act on the part of the government. Contracts are not moral issues. They are strictly pragmatic. However, we assure you, from the bottom of our collective heart, that we shall never expand the money supply, or allow the historic value of the currency to depreciate. It will be just as if we had a gold standard restraint on our printing presses. However, such a restraint is unnecessary, and besides, it is altogether too restraining."

3. Paying for Guardians

In 1969, an editorial appeared in *The Wall Street Journal*, the most influential business news newspaper in the United States, and therefore the world. "The best way for a nation to build confidence in its currency is not to bury lots of gold in the ground; it is, instead, to pursue responsible financial policies. If a country does so consistently enough, it's likely to find its gold growing dusty from disuse." This was standard free market economic opinion in 1969, and remains so today.

It is quite true that a gold coin standard is expensive. We dig gold out of the ground in one location, only to bury it in an underground vault. People cannot do this for free. Wouldn't it be more efficient, meaning less wasteful of scarce economic resources, just to forget about digging up gold? Why not keep the government or the central bank from expanding the money supply? Then the same ends could be accomplished so much less wastefully. "Save resources: trust politicians."

The gold coin standard is the way that individual citizens, acting to increase their own personal advantage, can profit from any monetary inflation on the part of the monetary authorities. They can "buy low and sell high" simply by exchanging paper money for gold at the undervalued, official exchange rate, and hoarding gold in expectation of a higher price, or selling it into the free market at a higher price. Why is the price higher? Because individuals expect the government to go back on its promise, raise the official price of gold (that is, devalue the currency unit), or close the gold window altogether. Citizens can become future-predicting, risk-bearing, uncertainty-bearing speculators in a very restricted market, namely, *the market for government promises*. It allows those who are skeptical about the trustworthiness of government promises to take a profit-seeking position in

the market. It allows those who trust the government's promises to deposit their money in a bank. Each side can speculate concerning the trustworthiness of government promises concerning redeemability of the currency, or more to the point, government promises concerning the future stability of the currency unit's purchasing power.

When we are told that it is inefficient to dig gold out of the ground, only to deposit it in a vault, we are not being told the whole story. Something is omitted. By tying the currency unit to gold—which is expensive to mine, as any monetary brake should be and must be—the body politic enlists a cadre of professional, self-interested specialists to serve as an unpaid police force: *commodity speculators*. This self-funded police force polices the trustworthiness of government monetary promises. The public can relax, knowing that a hard core of "greedy" capitalists is at work for the public interest, monitoring government budgets, central bank policies, and similarly arcane topics. By forcing a nation's treasury to defend its promises in the capital markets, the guardians are guarded by the best guards of all: future-predicting, self-interested speculators whose job it is to embarrass those who do not honor contracts—monetary contracts.

4. Public Confidence

Critics of the gold coin standard tell us that the value of any currency is dependent on public confidence, not gold. But what the critics refuse to admit is that the existence of the civil liberty of redeemable money is an important psychological support of the public's confidence in money. Even when the public does not understand the gold standard's theoretical justification—an impersonal guard of the monopolistic guardians—citizens can exercise their judgment on a daily basis by either demanding payment in gold (or silver) or not demanding payment. Like the free market itself, it works whether or not the bulk of the participants understand the theory. What they do understand is *self-interest*: if there is a profit to be made from buying gold at the official rate, and selling it into the free market (including foreign markets) at a higher price, then some people will enter the markets as middlemen, "buying low and selling high," until the government realizes that its bluff has been called, and it therefore is forced to reduce the expansion of the money supply.

I suggest this relationship: a government-guaranteed gold standard is to money what government-guaranteed health inspection is to prostitution.

Both guarantees are subsidies to the providers. Both guarantees create the illusion of decreased risk.

When money fails, legitimacy is lost, too. Gold's price is a test of political legitimacy: the value of a national currency. A rising gold price is a vote of reduced confidence in the state's money. This is why governments after World War I began did everything they could to remove gold coins from circulation. Politicians wanted no public referendum on the legitimacy of the state. They allowed political voting. Political voting can be controlled. Gold coins cannot be controlled. So, they were abolished by law.

5. De-Monetization

In the early phase of government money, the state monetizes gold. It places its stamp on gold coins. It asserts sovereignty over money in the name of preserving the value of money by guaranteeing the fineness and weight of the coins. Then, in the empire phase, debasement begins. The state de-monetizes gold. It substitutes base metals, and then calls the new coins equally valuable. The free market assesses the truth of this claim, exchange by exchange. The result of the de-monetization of gold is the decapitalization of the state. The state finds it more difficult to get the masses to accept its money.

The state's gold standard is preliminary to eventual confiscation or debasement. The state's promise of redemption on demand should not be trusted. This is why any call by conservatives for the state to adopt a gold standard is futile. First, no one will listen. Second, even if voters did understand the case for a limited state, they would not be able to limit the state by a state-run gold standard. A state-run monetary system becomes a debased standard.

This is why the free market is the only reliable source for the re-establishment of a gold standard. Honest money begins with these steps: (1) the revocation of legal tender laws that require people to accept the state's money; (2) the enforcement of contracts; (3) laws against fraud, which fractional reserve banking is; (4) the repeal of the central bank's government charter. The free market can do the rest.

F. "Flexible" Money

Flexible money is a euphemism for the government's ability to increase the money supply. The degree of flexibility is determined by the political

process, not by the direct response of those affected, namely, individual citizens who would otherwise have the right to demand payment in gold. *Flexible money means monetary inflation.*

Civil libertarians instantly recognize the danger of "flexible administrative law," or "flexible censorship," or "flexible enforcement of speed traps." Yet they have great difficulty in recognizing precisely the same kind of evil in "flexible monetary policy." The threat comes from the same institution, the civil government. It comes for the same reasons: the desire of the government to increase its arbitrary exercise of monopolistic power over the citizenry, and to limit public resistance.

The inflationary implications of "flexible monetary policy" can be seen in a revealing exchange between Dr. Arthur Burns, the Chairman of the Federal Reserve System, America's central bank, and Congressman Henry Reuss, Chairman of the Banking Committee of the United States House of Representatives in 1976. This was during the decade of the highest peacetime price inflation in American history. Dr. Burns had overseen this period of monetary inflation. The Federal Reserve was responsible for it.

> DR. BURNS: Let me say this, if I may: the genius of monetary policy—its great virtue—is that it is flexible. With respect to the growth ranges that we project for the coming year, as I have tried to advise this committee from time to time—and as I keep reminding others, including members of my own Federal Reserve family—our goal at the Federal Reserve is not to make a particular projection come true; our goal is to adjust what we do with a view to achieving a good performance of the economy. If at some future time I should come to this committee and report a wide discrepancy between our projection and what actually happened in the sphere of money and credit, I would not be embarrassed in the slightest. On the contrary, I would feel that the Federal Reserve had done well and I would even anticipate a possible word of praise from this generous committee.
>
> CHAIRMAN REUSS: You would get it, and the word of praise would be even louder and more deeply felt if you came up and said that due to the change in circumstances you were proving once again that you were not locked on automatic pilot and were

willing to become more expansive if the circumstances warranted. Either way you would get praise beyond belief.

"Praise beyond belief!" What government would want anything less? The state's solution: take the monetary system off "automatic pilot," and turn it over to those whose short-run political goals favor a return of the inflation-generated economic boom, once the boom has worn off because the central bank has not accelerated the output of fiat money. When this verbal exchange took place, I was Congressman Ron Paul's research assistant. Dr. Paul was a member of the House Banking Committee. He was the only defender of the gold standard on the committee. He had been on the committee for only a few weeks, having been elected in April in a special election. The central bank's policy of monetary inflation continued for another three years. When it ended under a new chairman, the United States experienced two major recessions: 1980 and 1981–82. That was the result of slowing the monetary base's inflation. I explain why in Chapter 36 on the business cycle.

Politically, there is a great deal of flexibility in monetary affairs. Few people even pretend to understand monetary affairs, and most of those who do really do not understand the logic of the gold coin standard. The logic is very simple, very clear, and universally despised*: it is cheaper to print money than it is to dig up gold*.

Fiat money is indeed more flexible than gold, especially in an upward direction. Fiat money allows the government to spend newly counterfeited money into circulation. It allows those who gain early access to the newly created fiat money to go out and buy up scarce economic resources at *yesterday's prices*—prices based on supply and demand conditions that were being bid in terms of yesterday's money supply. But this leads to some important problems.

1. Yesterday's prices will climb upward to adjust for today's money supply.

2. People will begin to have doubts about the stability of tomorrow's prices.

3. Producers and sellers of resources may begin to discount the future purchasing power of today's dollar (that is, hike today's

prices in anticipation).

4. The government or central bank will be severely tempted to "accommodate" rising prices by expanding the money supply.

Flexible money is state-issued and state-controlled money. It is not a restraint on state spending, unlike a gold coin standard or silver coin standard. It leads to greater state spending and rising prices.

G. Hyperinflation Does Not Last Long

In the industrial West, the last major hyperinflations came in the aftermath of World War I. Germany, Austria, and Hungary all suffered hyperinflations from 1921 through 1923. But then the central banks stabilized the money supply. Each of these national economies recovered rapidly.

There has been only one case of monetary hyperinflation leading to price index hyperinflation in the post-World War II era in any Western industrial nation above the equator: the State of Israel. Price inflation was around 13% in 1971. It was over 100% in 1979. It hit 133% in 1980. It was almost 200% in 1983. Prices quadrupled in 1984. At that point, the central bank reversed its policy and reduced monetary inflation drastically. Prices rose about 185% in 1985. In 1986, prices rose about 19%. The country's economy survived. I took a tour group to the State of Israel in 1984 to see the effects of inflation. There were no signs of disruptions. People were in shops in Jerusalem. Shop owners increased their prices in the local currency. People adjusted their budgets accordingly. Stores also accepted major foreign currencies. Tourism brought buyers with stable money to spend.

Hyperinflation cannot last long. When price inflation goes above 25% per annum, it does not take long for alternative currencies to be used in monetary transactions. The more rapid the hyperinflation, the more rapid will be transitions to alternative currencies. The official currency is no longer trusted. No one will lend money in the declining currency because of fear of expropriation when the currency falls even more rapidly in purchasing power. So, hyperinflation is not a solution to the problem of long-term government debt.

Governments in the West have promised old-age retirement security and low-cost medical care for people in their retirement years. These obligations extend out at least two generations. Hyperinflation cannot solve the

problem of central governments' looming inability to meet the obligations that have been promised to retirees. Hyperinflation lasts a few years at most. Then there is a currency reform. In the meantime, Western governments' obligations to pensioners continue to accelerate. They are a matter of demography.

Conclusion

There is nothing in the Bible that authorizes the civil government to create money, authorize money, or in any way manipulate the money supply. I am unaware of any principle of political theory, Christian or otherwise, that clearly establishes state sovereignty over money as a principle of civil government.

Because money is the central institution in a market society that enjoys a high division of labor, the control of money provides the controlling agency with more influence over the economy than the control of any other aspect of the economy. *The history of civil government is a history of the misuse of power.* Only in the rarest of occasions have societies found ways to restrict the expansion of centralized power over the lives of individuals and institutions. The Roman Empire from the time of Augustus until the mid-third century was a period of relatively stable money. The key monetary unit was the silver denarius. It was a tax coin. With the fall of pagan Rome to Constantine in the early fourth century, the longest period of monetary stability in man's history began. The gold solidus was also a tax coin. Rulers did not tamper with the gold content of this coin. It was even imitated outside the Byzantine Empire: solid gold counterfeits. This was unique in human history.

Biblical state sovereignty does not involve the creation of money. Because civil governments have asserted this sovereignty for over two millennia, the general public is unable to think of money apart from state power. Virtually everyone assumes that there is some innate ability of politicians and bureaucrats to regulate the money supply on behalf of the general population. The public does not see state issued money as a threat to their wealth, the stability of the economy, and the predictability of money's long-term purchasing power.

The history of civil government has been a history of monetary debasement. Politicians do not want the public to recognize the extent of the state's confiscation of wealth belonging to the public. Direct taxation of income

did not become widespread until the era immediately preceding World War I. Taxation in the form of sales taxes was common, but it was always limited. Any increase in taxation was immediately noted by buyers and sellers of the taxed goods. So, monetary inflation enabled state planners to extract wealth from the marketplace in a more subtle manner. In the long run, this has led to monetary inflation. In the century following the creation of the Federal Reserve System, prices in the United States rose 25-fold. The steady erosion of the purchasing power of the United States dollar, with the exception of the Great Depression of the 1930s, has been constant.

This is the problem of guarding the guardians. Politicians and bureaucrats are capable of bringing negative sanctions against counterfeiting of all kinds, but there is no institution that can bring negative sanctions against a civil government when it becomes the most influential counterfeiting agency of all. The solution to this problem is simple to describe: *separate the sovereignty of the state from the authority to create money*. The state enforces weights and measures, which includes the money supply. The state enforces contracts, and this reduces the ability of private counterfeiting through the fractional reserve banking system. I cover this in the next chapter.

27

BANK-ISSUED MONEY

If you lend money to any of my people among you who are poor, you must not be like a moneylender to him or charge him interest. If you take your neighbor's garment in pledge, you must return it to him before the sun goes down, for that is his only covering; it is his garment for his body. What else can he sleep in? When he calls out to me, I will hear him, for I am compassionate (Exodus 22:25–27).

Analysis

I have analyzed this passage in Chapter 49 of my commentary on Exodus. This series of prohibitions applied in the Mosaic economy to a special form of loan: a zero-interest charitable loan. Such loans were collateralized by an individual's freedom. If he failed to repay the loan on time, the creditor could enslave him for up to six years. Only in the seventh, sabbatical year was the loan repudiated by law, and the man allowed to go free. This form of loan was not a profit-seeking loan (Deuteronomy 15). [North, *Deuteronomy*, ch. 36]

Despite the fact that this debt law applied to charitable loans rather than business loans, this passage is extremely important for understanding the Bible's opposition to what is known today as fractional reserve banking. This law reduced the likelihood of a specific form of deception by a debtor. He might claim that he had collateral for a loan. He might do this with several lenders. By receiving loans from several lenders on the basis of this single piece of collateral, he would have been involved in a form of fraud. The fraud was multiple indebtedness on a single piece of collateral. The following analysis is an extension of what I wrote in the third volume of my economic commentary on the Book of Exodus: *Tools of Dominion* (1990).

Consider the case of a poor man who comes in search of an emergency loan from his neighbor. The neighbor assesses the man's character, and concludes that the man is likely to repay the loan. The lender has made a mistake. The man may visit several people to ask for an emergency loan. If he

collects from all of them, he may waste the money. Even if he repays these loans, he has dealt fraudulently with lenders by accepting numerous loans. They have unknowingly borne added risk. (This was the opinion of the twelfth-century Jewish scholar, Ibn Ezra, who cited Saadia Gaon.) But what if the lender suspects that the borrower is somewhat unreliable? The lender wants to honor God, so he intends to make the loan. But he wants collateral. He wants to give the borrower an economic incentive to repay the loan as soon as possible.

The borrower is poor. He has no collateral of value. But the lender can still demand the man's garment (coat). In contrast, he is not allowed to take the widow's coat (Deuteronomy 24:17). What good is this coat to the lender? He must return it in the evening, when the man needs it. It cannot be sold. But it has two important economic functions. First, the borrower has to come every evening to get back his coat. This is an inconvenience. He will have an added incentive to repay the loan. Second, because the garment is in the possession of the lender during the day, it cannot be used as collateral with another lender. *One piece of collateral can be used for only one loan at a time if the first potential lender demands collateral.* If the borrower kept it, and simply signed a note saying that it stands as collateral for the loan, he might sign several such notes for several lenders. If he defaults, they cannot all collect their collateral. Therefore, by permitting the lender to demand half a day's collateral, biblical law reduces the temptation on the part of borrowers to commit fraud.

The lender was not required to demand the borrower's coat for collateral. That was at the discretion of the lender. But the lender did have the legal authority to make such a request before extending a charitable loan at zero interest to the borrower. If a lender was allowed to do this with a poor man, then he surely had the right to make this request of someone who was asking for a business loan which would pay a rate of interest. The lender wanted to be sure that he would be repaid. By requiring a piece of property that the lender would want to use, the lender was increasing the likelihood that the borrower would repay the loan as promised.

A. Fractional Reserve Banking

Modern banking is based on a flagrant flouting of the prohibition against multiple indebtedness. For every asset (loan) a bank owns, there are many legal claims (deposits) against that asset. The bank keeps fewer re-

serves on hand to meet demands of lenders to the bank—depositors—than the bank has promised to deliver on demand. This is called fractional reserve banking. It is the universal form of Western banking, and it has been since around 1300. It was an invention of the Renaissance.

Depositors believe that their money is available on demand. The banks have promised them that it is available on demand. But it isn't. If every depositor came to the bank one day and began to withdraw his money, the bank would go bankrupt [bank + rupture]. The bank has loaned out the depositors' money in order to earn interest on the loans. Part of this return is paid to depositors as interest on their accounts. The depositors know this, but they all assume (as do the bank's managers) that not all depositors will try to get their money out of the bank on the same day. They assume that withdrawals will tend to equal deposits on any given day. Usually, this assumption is correct. But on the day when men lose faith in the solvency of the bank—the bank's ability to repay those few depositors who demand their money—a bank run ensues. Everyone wants his money at once. The bank defaults. It has run out of "garments."

Fractional reserve banking is inflationary, for it creates credit money—money that is backed heavily by faith. When a person deposits his money on the condition that he can write a check and spend it, monetary inflation is about to begin. The banker loans, say, 90% of this money to a borrower. The borrower then spends the money. Whoever gets the borrower's money then either spends it or deposits it in his bank, and the process continues. As a theoretical limit (though not always in practice), for every dollar deposited in a banking system with a 10% reserve ratio, nine additional dollars will eventually come into circulation. The process is described here.

Bank	**New Deposit**	**New Req'd Reserve**	**New Loan**
First Local Bank	$1,000	0.1 x $1,000 = $100	$1,000–$100=$900
Second Local Bank	$900	0.1 x $900 = $90	$900–$90=$810
Third Local Bank	$810	0.1 x $810 = $81	$810–$81=$729
Fourth Local Bank	$729	0.1 x $729 = $72.9	$792–$72.9=$656.1
. . .	$656.1	. . .	. . .
. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .
Totals	$10,000	$1,000	$9,000

Thus, fractional reserve banking is inherently inflationary. It also creates inflationary booms and their inevitable consequences, depressions. I discuss this in Chapter 35.

B. A Warehouse Receipt

The following is a just-so story. It appears in many academic discussions of the origin of fractional reserve banking. I am aware of no detailed historical studies of specific cases of warehouses for gold and silver becoming banks. But the story does explain the process of fractional reserves.

1. Safe Storage

There are risks associated with transporting gold and silver. Thieves threaten the net worth of someone who is heavily invested in gold coins, and who then moves these coins from one location to another. There are also risks of storage. "Do not store up for yourselves treasures on the earth, where moth and rust destroy, and where thieves break in and steal. Instead, store up for yourselves treasures in heaven, where neither moth nor rust destroys, and where thieves do not break in and steal" (Matthew 6:19–20). There is great responsibility in owning gold and silver.

Some owners seek ways to transfer some of this risk. They hire specialists in storing and transporting gold safely. Owners of gold turn over their gold to these specialists, who issue receipts. These receipts take on the characteristic features of money. They can be bought and sold as if they were gold. Because the receipts are exchangeable for specified quantities and fineness of gold, they become monetary alternatives to gold. These receipts can be printed on paper. They can also be stored digitally. The risk of loss cannot completely be transferred, but risk of loss through theft can be reduced.

If a storage company issues receipts to a specific quantity and fineness of gold, it makes its money by means of storage fees and ownership transfer services. The owner of the gold ingots or coins pays for these services. He is responsible; therefore, he must pay someone to accept some of the responsibilities of ownership, including storage. The person paying for a service is paying primarily for the specialized knowledge possessed by the seller. The seller knows what must be done to protect the coins. The owner of the coins does not.

The receipt may begin to function as money. If people trust the warehouse, they will accept a receipt for all or part of this gold in payment for

goods and services. A piece of paper authorizing the bearer to collect a specified amount of gold is just about the same as the actual ounce of gold. The gold is safer in storage, and pieces of paper are more convenient than pieces of metal.

As long as the warehouse company does not issue receipts in excess of the gold or silver stored in its vaults, this does not increase the money supply. The metal coins are taken out of circulation. They are no longer used to bid for the purchase of goods and services. They are replaced by receipts, which are used to bid for the purchase of goods and services. The metallic-based money supply remains stable. There is no redistribution of wealth.

2. The Great Temptation: Counterfeiting

A problem threatens the warehouse receipt system. What if the warehouse owner recognizes that people in the community trust him? They know that he has guards watching everything. He has always been scrupulously honest. He then betrays this trust. He writes warehouse receipts for gold for which there is no gold in reserve. He then loans these receipts to borrowers. The receipts serve as money. People accept them in exchange for goods and services. These warehouse receipts are considered "as good as gold." Why? Because they are always exchangeable for gold upon demand. Just take the piece of paper to the warehouse, and get your gold, minus a small storage fee or a transaction fee. No problem! But now there is a problem. There are more receipts for gold than there is gold in reserve to pay all the potential bearers on demand. These "demand deposits" are now vulnerable to that most feared of financial events, a bank run. Depositors who have receipts may demand repayment. There is not enough gold in reserve to meet the total demand. The warehouse has placed itself in a position similar to that of the poor man who immorally secures loans from numerous lenders on the basis of one piece of collateral.

The warehouse owner has become a banker. He makes loans, for which borrowers agree to pay him interest in the future, along with a return of the principal. But the money, once loaned out, is gone until the day that repayment comes. The warehouse is vulnerable to a run on the deposits. The warehouse owes gold to the depositors. It is indebted to them. The deposits are legal liabilities to the bank. The bank has become multiply indebted.

When the warehouse owner issues a warehouse receipt for gold when there is no new gold on deposit, he has thereby increased the money supply

in the community. No one has come to the warehouse and deposited gold (taken it out of the day-to-day economy). So, the unbacked receipt is inescapably inflationary. It adds money to the economy. I am defining "inflation" as "an increase in the money supply," the way that dictionaries and economists defined it before 1940. The result is either: (1) rising prices, or (2) prices will not fall as far as they would otherwise have fallen.

The warehouse receipt circulates as if it were gold. If the warehouse owner is very cautious, and he issues only a few extra receipts, probably nobody will find out. He will collect a little interest from borrowers. Prices of goods (as denominated in gold) will not rise. But if he continues to issue receipts, this will tend to raise prices. But gold bullion's currency-denominated price does not rise, since all of the unbacked receipts to gold are "as good as gold," and therefore supposedly identical to gold. The increase in circulation of these receipts does not initially push up gold's paper money-denominated price.

Those who hold gold get hurt initially. They see the paper money-denominated prices of other goods rising, but the market price of gold is unchanged. It looks as though lots of newly mined gold is coming into the market. But statistics are available to show that this is not true. The increase must be coming from the issuers of warehouse receipts. So, receipt-holders do the rational thing: they start buying goods and services before the price of these goods gets any higher. This puts upward pressure on prices, as denominated in gold receipts. That is to say, the market value of these receipts falls. Holders of these warehouse receipts try to pass them to other people. The decline in their market value continues.

3. The Contraction of Money

Then what happens? Store owners continue to take in a lot of paper receipts. They steadily deposit them with their local banks. Unlike the general public, bankers understand how the fractional reserve system works; at least they understand the risks associated with issuing more receipts for gold than there is gold to redeem the receipts. They become increasingly suspicious of each other's gold receipts. Too many receipts are being deposited by their customers. Many of the bankers know that there is not this much new gold coming into circulation. They demand payment in gold.

What if the public figures this out, too? Depositors think to themselves, "Maybe it would be prudent to cash in these receipts and demand delivery of

gold, just in case some receipt-issuing competitor is hit with a bank run." They start demanding gold for the receipts issued by suspected banks. This places added downward pressure on the gold-related price of some banks' receipts, and possibly on many banks' receipts. Thus, the bankers have an incentive individually to pull the plug on their own fractional reserve scheme. So do market speculators. Specialist traders suspect that the price of gold will rise when the deception is discovered, once the general public starts cashing in their warehouse receipts for their hoped-for gold. Thus, depositors, bankers, and speculators begin the run on the banks' gold hoards—a run that the bankers fear the public will initiate if the bankers do not get in line first. They dearly want to get in line first. This is why bankers and other sophisticated holders of gold receipts eventually go to the warehouses and start demanding their gold. They understand that at least some of the banks are technically insolvent. They are not sure which ones are weakest, so all the banks risk getting hit. Receipt-holders want their gold now, while they can still get it on demand. The run on the warehouses begins. Warehouse receipts for gold continue to fall in value compared to gold. Other people then rush down to get their gold (which is now rising in value compared to the warehouse receipts people are holding). The insolvent banks collapse, or else they are forced to delay repayment to receipt-owners.

This declaration of insolvency (insufficient reserves) is similar to the action of the wicked coat owner who has multiply indebted himself, and then leaves his creditors standing out in the cold. Fractional reserve banking violates two biblical principles: (1) honest weights and measures, and (2) no multiple indebtedness. Fractional reserve banking is inflationary while people accept the checks, and deflationary when confidence in the banks finally collapses. The evil of fractional reserve banking is not created by the phenomenon of interest (time preference) as such. It is not money-lending as such that is condemned by the Bible; rather, it is borrowing with collateral that you do not have and lending what you do not have (i.e., issuing receipts for commodities not held in reserve).

C. The Banking Cartel

Bankers are like businessmen in every field. They want to reduce competition. They want to reduce the number of new competitors who would otherwise come into the industry when they recognize that members in the industry are reaping above-average profits. So, they band together as a spe-

cial-interest group in order to persuade governments to restrict the entry of new competitors into the field. They claim that only through government intervention into the banking sector of the economy can uninformed depositors be protected from unscrupulous bankers.

In no nation do we find the banking industry operating without extensive government regulation. These regulations are written by the banking cartel's lawyers. They are the experts, so politicians allow them to have input on what kinds of regulation should be in force. This is true of every regulated industry. There is a close relationship between the regulated industry and the regulators in the government. This is especially true because in most nations, senior regulators in the government are able to work for the high-paying firms in the regulated industry when they resign from the government. This is called the *revolving door effect*. It is how industries capture government regulatory agencies. In no industry is this capture more secure than banking.

Banking is correctly perceived by politicians and bureaucrats as the most important single profit-seeking sector of the economy. If there is a serious crisis in the banking industry as a whole, it will affect the entire economy negatively. So, the regulation is intense. This keeps newcomers from entering the market. It grants to existing banks the power to earn above-average returns. *Banking is therefore the most important cartel in every nation.*

Banking is the largest cartel in the world. This is the central industry in every nation because it controls the money supply. Bank money is used in almost all transactions. This means that a single cartel in a nation is the dominant source of economic output. If there were a crisis in the banking system, it would threaten the national economy. It could create a depression. This is what happened in the West in the 1930s.

D. Central Banking and the Cartel

In each nation, a central bank writes the rules for banking. It controls the nation's monetary system. It is the agency of enforcement for the banking cartel. A handful of banks are dominant in this cartel—perhaps five or six. They have a majority of all deposits. If any of these large banks should go bankrupt, this would shrink the money supply of the nation. It would create a financial panic in the capital markets. This panic would spread to the general economy. *Therefore, the central bank's primary function is to make certain that these few banks do not go bankrupt.* This is the supreme unofficial goal of

central banking. This is never mentioned in any public document. The largest commercial banks want protection against bank runs by their depositors. The central bank provides "liquidity" in a crisis, meaning counterfeit money, which it supplies to the largest banks whenever they are come under assault by their depositors. These banks are considered too big to fail.

Central banking is an extension upward of fractional reserve banking in general. It secures the banking system from bank runs. It was deliberately designed to keep market forces from bankrupting large insolvent banks. Without the protection of national government agencies, fractional reserve banking would face the prospect of bank runs, as lenders (depositors) would lose faith in overextended (multiply indebted) banks. The most important form of collateral a bank should have is its reputation for honesty and conservative (minimal fractional reserves) investing policies. In the early twenty-first century, however, a commercial bank's most important form of collateral is the legal backing by the government, which stands ready to repay individual depositors (but not large investment funds) in bankrupt banks—a guarantee that is ultimately backed up by the fiat money of the nation's central bank.

1. The Quid Pro Quo

Beginning in 1694 in Great Britain, bankers organized a central bank. The central bank was set up in order to protect banks from bank runs by depositors. The central bank would intervene in order to keep insolvent banks solvent, so that there would not be the spread of a banking panic throughout the economy. This was a privately owned, profit-seeking bank. Promoters of the bank promised Parliament that the bank would create a sure market for government debt. In return, the central bank would receive the right to create money out of nothing in order to purchase the government's debt. The government would then pay the central bank a rate of interest for the newly created money. The bankers promised that this would enable the government to sell its debt at low interest rates. That was because the bank could create the money out of nothing and lend it to the government. The government accepted this arrangement. The Bank of England was nationalized after World War II, but from 1694 until 1946, it was a privately owned bank that profited from counterfeiting.

A central bank creates money out of nothing in order to purchase any asset, which is usually government debt. The money is transferred to the

government's account in commercial banks. The government immediately spends this money on whatever projects the government is subsidizing. The money immediately flows into the commercial banking system, and it begins to multiply through the fractional reserve banking process.

In the days when central banks were allowed to retain interest paid on government debt, central banking was extremely profitable. It literally was a license to print money. But during World War II and immediately after, this tremendous benefit for large central banks was removed either by law, in the case of the Bank of England, or by the willingness of the Federal Reserve System to turn over all money not used to pay for central bank operations to the government at the beginning of the calendar year.

2. Protecting the Largest Banks

In every nation, the nation's central bank intervenes in order to save the banking system from bank runs in times of crisis. The government accepts this protection scheme as a matter of policy. The government therefore has turned over most of the regulation of the banking system to the nation's central bank. *The central bank is the enforcing agency of the banking cartel.* If a somewhat smaller bank is threatened by a bank run, the central bank arranges an orderly sale of the assets of the insolvent bank, which means all of its loans, and then it provides whatever money is necessary for larger commercial banks to buy these assets.

This system of protection against bank runs encourages the policy-makers of the largest banks to make high-risk investments that pay above-average rates of return. The bankers know that their banks will not be closed if these investments should prove to be ruinous in a time of crisis. Always, the largest banks are protected from bank runs in whatever form they occur. This is referred to as "moral hazard." The phrase was coined in 1873 by a British journalist, Walter Bagehot.

Because the central bank is created by government law, and because it has a monopoly over the creation of what is called monetary base money, the bank's policy-makers have enormous influence in the economy. The trouble is, it is no longer clear which policies produce long-term economic growth. Keynesian economics favors the expansion of the monetary base at all times, and especially during economic crises. The only school of economic opinion that opposes central banking is the Austrian School. It has no influence in academia or in central banking.

None of this is discussed in any college-level textbook. The chapter on cartels is always hostile to cartels, but there is no mention of the fact that commercial banking is a cartel, and in fact is the dominant cartel in every nation. The central bank is never discussed as an enforcing agency of the banking cartel. It is always praised as an independent agency, meaning independent from the legislature of the national government. In this, central banking is unique. Textbooks on economics and political science are always in favor of democracy. There is only one exception to this: central banking. The central fact of the central bank is rarely discussed by academic economists. For all of the technical sophistication of the analyses that we find in introductory economics textbooks and even advanced economics textbooks, they all avoid discussing banking as a cartel and the central bank as the agency of enforcement of this cartel.

E. Central Bank Counterfeiting

You understand how the initial deposit was the first step in the process of deposit creation through fractional reserves. Perhaps you asked yourself a question: "Where did this depositor get his money to deposit?"

The fractional reserve banking system can increase the total money supply by lowering the reserve ratio. The nation's central bank sets the legal reserve ratio. But what if the reserve ratio is fixed? The banking system should no longer be inflationary. The reason why modern banking is inflationary is because of the central bank's creation of new money when it purchases a debt certificate issued by any national government. When the central bank makes the purchase, the commercial bank used by the national treasury receives a deposit. This deposit begins the process of fractional reserve pyramiding. The government spends this money immediately. This reduces its bank account, but someone receives this money. He receives this money in the form of a check or a direct digital deposit in his bank account. The increase in the money supply that was initially created by the central bank's purchase of a government debt becomes the foundation of a new wave of monetary expansion through the commercial banking system.

The central bank reduces its holdings of government debt by selling the debt or refusing to purchase substitute debt when existing government debt instruments expire. This does not happen often. When it does, this has the effect of reducing the monetary base, which in turn reduces the money supply in the economy. The multiplication effects of fractional reserve banking then

reverse. The inverted pyramid of money begins to shrink. This can set off the contraction phase of the business cycle, which I discuss in Chapter 35.

Usually, central banks do not deflate the monetary base. Governments want to sell their debt certificates at the lowest possible interest rate. Therefore, they pressure the central bank to buy at least some of the debt. The central bank can do this without initially raising interest rates. Of course, if the central bank continues to do this, the counterfeit money injected into the banking system will eventually raise consumer prices. When that happens, long-term interest rates rise because lenders do not want to lend their money and then be repaid in money of reduced purchasing power. This is the price inflation hedge component of market interest rates. The longer the term of the loan, the more likely that lenders will lend only at a higher interest rate.

If the central bank refused to buy any additional debt certificates, thereby stabilizing the monetary base, the fractional reserve banking system could not increase the amount of money in circulation unless the central bank lowered the reserve requirement. In short, the central bank is in charge of the primary components of the nation's money supply.

F. A Modern Bank Run

Banking in the modern world is not based on gold. It has not been based on gold coins in the West since the outbreak of World War I in 1914, except for the United States. It has not been based on gold coins in the United States since the ownership of gold was unilaterally declared illegal by newly inaugurated President Franklin Roosevelt on March 6, 1933 at 1 AM, eastern time. It has not been based on gold bars owned by foreign central banks and governments ever since August 15, 1971, when President Richard Nixon unilaterally abolished the post-World War II gold exchange standard, which was created by an international agreement at a hotel in tiny Bretton Woods, New Hampshire in 1944.

1. Powerless Small Depositors

With the abolition of the gold coin standard in 1914 and 1933, there was no way for citizens to go to their banks and withdraw gold coins in exchange for bank accounts or paper money. This reduced the threat of bank runs by the public. Second, with the abolition of the 1944 Bretton Woods agreement by Richard Nixon in 1971, there was no further threat of a run against the

gold held by the United States government. The removed international restraints on the expansion of money by the Federal Reserve System.

The general public has no influence on the money supply. So few people have a significant amount of money deposited in local banks that the common man is not a relevant factor in the decision-making of commercial bankers. The key players in modern banking are large-scale depositors of digital money: *investment funds*. The most important aspect of modern fractional reserve banking is not the issuing of checks or even credit cards. The most important aspect of modern fractional reserve banking is the mismatch between the short-term liabilities of the largest banks to depositors (investment funds) and the banks' policy of investing in long-term assets and highly leveraged credit instruments that will not be salable in a crisis.

There used to be limits to the expansion of banknotes and checks drawn on banks. The main limit was the threat of a bank run: the withdrawal of currency. For small banks, bank runs by common depositors were always a threat until the development of government-based deposit insurance. This came in the United States in 1934. After that, there were no more bank runs by average depositors. The major threat to banks today is the threat of large depositors transferring their accounts to rival banks. This can take place with an announcement by a large depositor that it will not roll over its short-term deposits when they mature in a few days. On that day, the depositor can transfer his entire account digitally to other institutions. Under these circumstances, a bank can go out of business in a matter of days. It has to sell assets, and these assets may not be highly marketable. They fall in value rapidly. The bank then cannot meet its obligations, and it is forced into bankruptcy.

The problem is leverage. Banks gain high profits by purchasing investment assets that are not salable in a short period of time. The bank is "borrowed short." Depositors have the right to remove their money digitally at any time. The bank has purchased assets that cannot be converted rapidly into digital money. The problem comes when large depositors lose trust in the portfolio of a particular bank. These depositors can transfer their money in a matter of hours. The leverage gained by the bank prior to the bank run becomes a liability when the bank run begins.

The public does not see a bank run in progress. There are no lines in front of banks. Frantic depositors with a few hundred dollars in the bank are not lining up to withdraw paper money. This was the case in the Great

Depression in the early 1930s, but it is no longer the case. There is almost no warning.

2. Central Bank Enforcement

Today, most deposit-taking banks are part of the national banking system. They are under the jurisdiction of numerous government agencies, but the most important jurisdiction is the nation's central bank. The central bank sets the rules on what loans are legitimate and what loans are not legitimate. Today, most central banks are lenient with respect to the purchase of highly leveraged investment assets. They do not know whether or not these assets will be salable in the case of a bank run. Central bankers assume that the assets that are being sold by a bank that is suffering a bank run will be purchased by whatever banks are the recipients of the digital money being removed from the threatened bank. But there is no guarantee that this will be the case. The suspect bank may go out of business. Then the central bank must intervene and find ways of enabling other banks to purchase the discounted assets of the now bankrupt bank. The problem is this: the bankrupt bank may have more dead assets on its books than the central bank can easily purchase with the expansion of its own digital counterfeit money. If it does expand the supply of its own digital money in order to compensate for the losses sustained by the now bankrupt bank, this may increase prices for the general public. Monetary inflation will produce price inflation.

Any bank that is suspected of having invested in highly risky securities is subject to a bank run when large depositors become convinced that it is insolvent. They do not wish to be late in the process. But the process may take only days to be completed. The bank runs out of rapidly marketable assets, and is unable to honor requests by depositors to transfer the digital money to a different bank. If the bank is declared insolvent, or is functionally insolvent, other banks could become subject to the same kinds of fears by depositors. They could become the targets of digital bank runs.

With each collapsed large bank, the money supply shrinks if the central bank does nothing. If the central bank does not intervene in some way by creating digital money out of nothing, so that the banking system as a whole does not shrink the money supply because of failures of a few large banks, this leads to monetary deflation in a very brief period of time. This is why central banks always intervene. But there is no guarantee that they will be

able in every case to intervene with a sufficient amount of digital money to preserve trust in large, highly leveraged banks.

Fractional reserve banking creates opportunities for high profits by skilled bankers. But these opportunities for high profits are subjected to enormous risks of bank runs. This in turn subjects the entire economy to the risk of large-scale bankruptcies of banks and massive monetary deflation, which in turn lead to bankruptcies of over-indebted borrowers, especially business borrowers. This creates an economic recession with widespread unemployment of people, raw materials, and capital goods.

When a bank suffers a run by large depositors, it refuses to lend out money as debtors pay off their loans. It builds up its depleted reserves. If this bank has the ability to call in loans on demand, as is usually the case with business loans, the businesses have to find enough money to pay off their loans. If a business has deposited money temporarily as working capital in another bank, it will demand payment from its bank, so that it can pay the loan off to the bank that lent the business the money. So, the next bank is threatened with a run. It calls in loans. This series of withdrawals creates an implosion in the banking system. This is deflationary.

G. Reconsidering Monetary Theory

All schools of economic opinion argued until 2010 that there is a close relationship between the expansion of the money supply and a rise of prices. Different schools of opinion debated over the extent of this connection, but all of them affirmed this. The most forthright statement was made by Milton Friedman in 1970: "Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output." In 1983, Murray Rothbard wrote in Chapter III of *The Mystery of Banking*, "An increase in the supply of money, then, will lower the price or purchasing power of the dollar, and thereby increase the level of prices."

This did not take place in the United States, Japan, and Western Europe in the aftermath of the recession of 2008/2009. The Federal Reserve System expanded the monetary base from $900 billion in October 2008 to $4 trillion in September 2014, but there was little price inflation: about 2% per year. The European Central Bank expanded its monetary base by a comparable amount: four to one. So did the Bank of Japan: over four to one. Yet none of the regions experienced significant price inflation. Japan's consum-

er price index was almost unchanged over the next decade.

The vast expansion of the money supply by the People's Bank of China from 1999 over the next 20 years had little effect on retail consumer prices. The increase in M-1 was over ten-fold. The increase in M-2 was over 20-fold. Consumer prices did not rise appreciably. The international exchange rate of China's currency did not fall. By 2012, China had become the largest exporter in the world, which means that it had goods to export. Therefore, the absence of a rise in the consumer price index was not the result of price controls. If there had been price controls in China, China would not have been able to export goods. There would have been massive shortages of goods. China's experience has obliterated the monetary theories of all schools of economic opinion. All schools of opinion had argued that monetary expansion on this level would have created mass price inflation in China, which had full employment.

At present, all schools of economic opinion have remained mute on this issue. They have no answer, so they do not talk about it. It is almost as if this experience had not taken place. In economic treatises, authors pretend that the major theoretical problems have cogent answers. Mine does not. If there is one area of economic theory in which an obvious anomaly will force younger economists and outsiders to rethink the tenets of economic theory, it is this discrepancy. High monetary inflation did not create comparable price inflation in the first two decades of the twenty-first century.

An economist would be unwise to say that price index hyperinflation is impossible. But it appears that the hyperinflation of prices in Western industrial nations is much less likely than major recessions that are the result of prior inflations of national monetary bases. There have been hyperinflations in non-Western countries. The worst case was in Hungary in 1946. Zimbabwe came in second in 2008. Venezuela suffered severe price inflation after 2015. These were small countries that did not have high output or large populations.

Monetary inflation still has disrupting effects in the capital structure of a nation. The initial expansion of money creates an economic boom. Businesses go into greater debt. Governments go into greater debt. The result is a misallocation of capital resources. These misallocations result in recessions. Conceivably, they could result in a worldwide depression. So, there are still negative consequences of dishonest money, but hyperinflation of prices seems unlikely to be one of them in the industrial West and Asia.

H. The Accumulation of Debt

The policies of monetary inflation have led to a vast expansion of debt, especially government debt. But this also includes corporate debt. Around the world, this vast increase in debt has been funded by central-bank policies of low interest rates. This has increased the vulnerability of the international economy to a breakdown in the structure of liabilities. While monetary inflation has not created a comparable rate of price inflation, it has created a willingness on the part of decision-makers to rely upon debt to achieve the goals of the institutions that employ them.

By creating money, central banks and fractional reserve banks persuade decision-makers to adopt policies that they would not otherwise have adopted, if the expansion of the money supply had not pushed down interest rates. This is an aspect of a misallocation of capital. Entrepreneurs as well as politicians have adopted long-term programs that could not have been funded by the private sector. The rate of savings would not have sustained these projects. These projects were subsidized by the expansion of money.

Central banks have been most at fault for adopting policies of vast monetary expansion. With the exception of Austrian School economists, academic economists have not sounded the alarm. It is likely that the worldwide disruptions caused by default and bankruptcies in the private sector, coupled with default on the part of governments because of unfunded liabilities, will force a reconsideration of monetary theory. The economic crisis of the 1930s led to the adoption of the economics of John Maynard Keynes. There has been no comparable international economic disruption since the 1930s. When it arrives, as it surely will, there will be a real possibility of persuading the younger generation of economists and political decision-makers of a different approach to economic theory.

Conclusion

Fractional reserve banking is universal in the modern world. It is a system in which bankers are able to extend credit that their banks have created out of nothing. Bankers are able to gain an interest return on money that their banks have created through a process of legal counterfeiting. This is highly profitable banking.

Fractional reserve banking is a system of leveraged debt. In biblical banking, debt is not leveraged. For every debt, someone has made a deposit. A banker cannot safely lend more money than he has taken in from deposi-

tors. The depositor is a creditor to the banker. The banker is a debtor to the depositor. The threat of a bank run restricts the lending policies of profit-seeking bankers. Without the protection of national governments' central banks, fractional reserve banking would face the prospect of bank runs, as lenders (depositors) lose faith in overextended banks.

The biblical principle that allows a lender to demand some form of collateral from a borrower is protection against the pyramiding of debt. Even if the form of collateral is not useful to the lender as a tool of production, it does restrict the borrower from indebting himself to multiple lenders on the basis of one piece of collateral. This principle is foundational to safe banking practices. Fractional reserve banking creates great vulnerability for the solvency of individual banks, and it also creates vulnerability for the entire banking system. Central banks have used monetary inflation on a massive scale in the second decade of the twenty-first century to keep the banking systems of the West from collapsing. This has encouraged the largest banks to continue their policies of high leverage and high profits that would otherwise have bankrupted these banks if there had not been intervention by the central banks to bail them out.

28

MARKETS AND DISCOVERY

For the kingdom of heaven is like a landowner who went out early in the morning to hire workers for his vineyard. After he had agreed with the workers for one denarius a day, he sent them into his vineyard. He went out again about the third hour and saw other workers standing idle in the marketplace. To them he said, 'You also, go into the vineyard, and whatever is right I will give you.' So they went to work. Again he went out about the sixth hour and again the ninth hour, and did the same. Once more about the eleventh hour he went out and found others standing idle. He said to them, 'Why do you stand here idle all the day long?' They said to him, 'Because no one has hired us.' He said to them, 'You also go into the vineyard' (Matthew 20:1–7).

Analysis

I have analyzed this passage in Chapter 40 on my commentary on Matthew. This parable rests on an assumption, namely, that information regarding supply and demand is limited. We know it to be limited in our own lives, and Jesus here was saying that this limitation extends to the entire economy.

A landowner wanted to hire workers to work in his field. He found an initial group of potential laborers. He offered them a price: one denarius per day. All of them took the offer. They went into the fields and labored the full day. Somewhat later in the day, the landowner went to a location where he expected some workers to be available. He was correct. He offered them something in return, but he was not specific. He must have had a good reputation, because he was able to employ additional laborers. They trusted his promise to pay them a fair wage for their labor. He repeated this twice more. They all agreed, and they all went into his fields to work.

There was a discovery process for both the employer and the employees. He did not know what to expect early in the morning. Neither did the day

laborers. They had hopes of coming to an agreement and gaining employment. He had hopes of hiring people at a wage he was willing to pay. But neither side knew in advance that they would be able to consummate the transaction. This scenario was repeated four additional times in one day. Even so, there was limited information in the community. Late in the day, there were still potential workers standing around, hoping that somebody would make them an offer.

This parable would make no sense if there were widespread knowledge of the conditions of supply and demand for labor. This parable assumes that, even in a tightly knit community where people could walk from the marketplace to a specific landowner's fields, there was insufficient information regarding (1) his desire to hire employees and (2) employees' desire to work for a wage. When Jesus presented this parable, He did so on the assumption that the initial conditions of the parable would be believable to his audience. They would understand that *information regarding economic conditions is limited even in a local community.*

If word had gotten out that there was employment, some potential employees might have walked to the landowner's property. This assumes that they knew which landowner was hiring. Presumably, they would have known. But this would have required an investment of time by the workers. They would have had to walk to the place of potential employment. Meanwhile, another landowner might come to the central location in search of employees. Anyone who was not present when that offer was made would miss out. Workers were unwilling to bear the uncertainty associated with searching for available jobs. They believed they would have a better opportunity of gaining employment by being present in the labor marketplace that would have been known to local employers. An employer would have to take the initiative of going to the marketplace, or sending an agent, and making the offer. The employer was the person with money to spend. He had capital. Employees expected him to go to the effort to come to them.

In the parable, there is a marketplace: a well-known geographical location where potential buyers and sellers of labor assemble in order to make profitable market transactions. The search costs are lower in the marketplace than they are anywhere else. Because search costs are lower, the marketplace attracts buyers and sellers of labor. It is a location that serves as a clearinghouse for both employers and employees. This conserves knowledge. It reduces the cost of making mutually profitable transactions. The

presence of lower search costs is what attracts buyers and sellers of labor to a single location.

A local marketplace is personal. People have reputations. Specific information about specific workers and specific employers is available to participants on both sides of the employment transaction. This reduces the likelihood of making a decision based on incorrect information. *The smaller the marketplace, the greater the impact of personal knowledge in facilitating a voluntary transaction.* The larger the marketplace, the more impersonal the available information is. Employers do not have enough time, money, and incentive to make detailed investigations of specific employees who supply common labor services. Employers are far more governed by price than they are by specific information about a specific employee's background.

The parable is about the kingdom of God. In describing this kingdom, Jesus made it clear that the participants did not have full knowledge of each other's motivations and abilities. There was great ignorance on both sides of the transaction. This describes our condition inside the kingdom of God. Despite the fact that we know that God is in charge, we do not know all the things that God knows. We do not possess knowledge as creators. We possess knowledge as created beings. We are finite. We are also sinful. We do not see the hand of God in every event around us. In this sense, we see the world as impersonal. But the world is not impersonal. The kingdom of God is not impersonal. This is why God imputes meaning to it moment by moment. This is why Jesus said the following: "I say to you that in the day of judgment people will give an account for every idle word they will have said. For by your words you will be justified, and by your words you will be condemned" (Matthew 12:36–37). A God who is not omnis cient would not have a record of everything that everybody has thought and said in history. We can safely conclude that the world is not impersonal. On the contrary, it is comprehensively personal. Therefore, the market process is not impersonal.

The employer had money to spend. Money is the most marketable commodity. In contrast, the workers had only their labor as a marketable asset. Their labor was more specialized than money. There was greater uncertainty associated with the ownership of labor to rent than the ownership of money with which to rent labor. The person with money was presumed by everybody to have superior knowledge of the market. He had been successful in accumulating land and money. He was in the stronger bargaining

position. He understood this, and so did the laborers. This is why they remained in the marketplace, in the hope that employers would come to make offers. There was greater risk of rejection of an offer to supply labor than the rejection of an offer to pay money.

There is an inherent asymmetric structure to bargaining whenever one of the parties has money. He is in a stronger position because he has a broader market of available people who will accept his offer to pay money. There are more people competing for ownership of his money than there are people with money competing to buy specific kinds of labor.

A. Larger Markets

Here, I extend this analysis to the economy in general. There is limited knowledge of the conditions of the supply and demand of labor in a local community. Compare this to a regional economy. We might imagine that the latter knowledge would be even less. But is it?

In a regional economy, or in a large city, knowledge of who is hiring and who is willing to rent labor services is not specific. It is not visibly personal. Yet we know that employers are able to find employees. Employees are able to find employment. Unemployment is relatively rare, even in economic recessions. In the worst year of the Great Depression in the United States, 1933, unemployment reached an all-time high of 25%. But this means that 75% of heads of households who wanted to work were able to find jobs.

There was trial and error in the small-town environment of the parable. Nevertheless, from the point of view of actual unemployment, there is greater predictability of the labor markets in today's world of prices and specialization than there was in the small town of the parable. How can this be?

The market process is, above all, a process of gathering relevant information and applying it to specific circumstances. Information, meaning accurate information, is a scarce resource. The market process is one of constant competition. Sellers compete against sellers. Buyers compete against buyers. They compete in many ways. The primary way in which strangers compete against other strangers is by means of price. Prices are objective. They reveal the state of the market. They reveal that individuals have been willing recently to accept offers at specific prices. The information appears to be highly impersonal, yet people with highly personal priorities, goals, and resources are able to work out mutually beneficial exchanges with each other. There is a constant reconciliation of individual plans of action.

Changing prices, more than any other source of information, provide the motivation to make changes in our plans. Prices are relatively inexpensive to convey. Decision-makers can make better decisions because they have access to prices. By better decisions, I mean decisions that enable them to achieve their goals with a lower expenditure of resources than would have been possible if they had not had access to the information.

As the market's influence spreads, larger geographical units become part of this process of information sharing. Because of international trade, the free market economy extends across national borders. This enables buyers and sellers of goods and services to take advantage of the best possible knowledge available of local circumstances. This kind of knowledge isessential for effective economic planning. It is available on a constant basis through market reporting systems. Prices are easy to communicate. It would be incorrect to call this condensed knowledge. Knowledge is not condensed in a price. What is revealed is either *a recent exchange* of a specifically defined form of property or else what a seller of the specially defined form of property is *willing to accept* in exchange for money. With this highly specific information in the form of a price, other decision-makers can decide whether or not to pursue an exchange.

The market process today is dependent upon a price system. The price system conveys information concerning the recent conditions of supply and demand. *The larger the market, the wider the range of influence of objective prices*. It is not necessary for employers to go to a location somewhere in town in the hope of finding low-cost employees. Nevertheless, such locations do exist in most cities in the United States. Employers hire part-time laborers without contracts. They pay these laborers in currency at the end of the day. These laborers do not have access to the legal employment markets. They may be illegal immigrants. They may be people who are willing to work below a state-mandated minimum wage. Whatever the reason, they prefer not to be part of the normal employment process. Their employment is far more uncertain than the employment provided in the conventional labor markets.

This means that the *more impersonal* the market, the *more predictable* it is. It means that the larger the market, the more predictable it is. The reason for this is the price system. Prices are specific. They convey specific information about specific markets. Search costs are low. Competition is widespread. The range of ignorance regarding market conditions is narrow. The need for face-to-face negotiation is less because the range of ignorance

is narrow. People know what to expect. The rate of return on accurate information is high.

B. Bidding for Information

When someone makes an offer to sell something at a specific price, he is in search of a buyer who is willing and able to pay this price. He does not know where this buyer is, or who he is, or perhaps even where he is. He does not need to know if there is a predictable delivery system, either digital or physical. The delivery system is highly competitive, which means both parties to a transaction can concentrate on the sales price.

With the development of the Internet and specifically the World Wide Web, bidding for information has become international. As the cost of making a bid declines, more people make bids. The more people who make bids, the narrower the range of ignorance of opportunities. People can make more rapid decisions.

Markets are a discovery process. Markets are governed primarily by means of objective prices, but they are also governed by written contracts. Individuals can spell out their responsibilities. They become clearer about these responsibilities. The willingness of individuals to take on more responsibility is the primary dynamic factor underlying economic growth. It is also the essence of the dominion covenant.

As economic growth increases, the number of opportunities also increases. This is the best definition of economic growth: an increase in the number of opportunities available to people with fixed monetary incomes. Their money will buy more. Their money becomes more productive, their time becomes more productive. They seek out a better rate of return on their money. They also seek out a better rate of return on their time. As buyers, they possess money. They seek better prices, better deals, and a better lifestyle. As sellers of labor services, they seek buyers who are willing to pay what they ask. *Without the market process, they would be unable to increase the number of opportunities available to them*. They do not know where these opportunities are. They can search for these opportunities only because of the market's process of making available relevant, specific information in the form of prices.

If people knew where the relevant information is, they would not need the market process to guide them to this information. Similarly, in the parable, if the employer had known there was a large supply of available labor-

ers, he would not have had to go back throughout the day to hire more of them. The same can be said of the laborers. They would have shown up early in the morning, and they would have accepted the offer of employment. But they did not know.

C. Discovery and Dominion

The central fact of the discovery process is this: *no one knows in advance what is going to be discovered*. Humans are finite. They have limited knowledge of themselves and the world around them. This is an inescapable aspect of their finitude. This is why the discovery process itself is eternal. The dominion covenant mandates the extension of man's control over nature (Genesis 1:26–28). [North, *Genesis*, chaps 3, 4] This is not optional. This is definitional. It literally defines mankind.

The model was established in the garden. Adam and Eve had limited responsibility within the confines of the garden. But in the midst of the garden was a river that broke into four rivers, and these rivers would have carried mankind out of the garden into the world. Adam and Eve were to start small, but then they were to extend their dominion geographically. But this extension was not simply geographical; it was intellectual. They had to have greater understanding of the cause-and-effect system that governs the world. This is a never-ending process. Man is finite; God is not. Man has a responsibility to extend his dominion because he is made in God's image. But he will never be omniscient. *The discovery process is an eternal process*. It is a characteristic feature of mankind.

The primary form of dominion is not biological or geographical. This is because population growth in Eden, if compounded at 5% per annum, would have filled the earth in a few centuries. So, the primary form of dominion is intellectual. Each new discovery opens up new realms of investigation. Each question that gets a preliminary answer by some creative individual raises new questions that call forth new investigators and new approaches to investigation. Not only does man's knowledge not approach the omniscience of God; it moves in the opposite direction. *The more that men learn, the more questions they have*. The more that men extend dominion operationally in their environment, the more opportunities for greater dominion are discovered.

The private property system that is established by biblical law is the judicial foundation of constant innovation. Someone who discovers a profit-

able approach to solving a particular problem becomes responsible for the administration of that process. In order to encourage this extension of personal responsibility, the private property legal system allows discoverers to profit economically from their discovery. There is an economic incentive associated with the discovery process. *An inescapable aspect dominion is an increase in personal responsibility.* Therefore, God has established the central benefit of the private property legal order: economic encouragement for people to seek out new opportunities to exercise greater personal responsibility.

D. Discovery and Ownership

Ownership establishes personal responsibility. This responsibility is legal: trusteeship. It is also economic: stewardship.

The biblical-based discovery process is based on the private ownership of property. Private ownership is an incentive to pursue innovation. This discovery process links the responsibility of innovation with the benefits of innovation. The person who discovers a new process or insight is legally allowed to profit economically from his discovery. He must take responsibility for it, but this responsibility is always associated with potential benefits. *There is a positive incentive for taking responsibility.* This incentive is increased personal wealth. The positive sanctions associated with obedience to biblical law (Deuteronomy 28:1–14) are manifested in higher rates of innovation than in societies in which private property is not widely dispersed and defended by the civil government.

The discovery process is an aspect of the biblical doctrine of imputation. It is the ability of an individual to discover correlations between general laws, including economic laws, and predictable outcomes. Men are made in the image of God. Therefore, they have an understanding of God's laws of causation. Individuals find themselves in specific historical and geographical conditions. They have the responsibility of extending dominion in these areas of personal responsibility. To do this, they must make judgments regarding the correct application of general principles of causation in relationship to the historical world around them. This is the procedure of modern science. This is also the procedure of entrepreneurial innovation.

Imputation is subjective. It involves the application of objective rules of order to objective historical conditions. It is this combination of subjective evaluation of historical facts and rules of creation that is the essence of both

science and entrepreneurship. Neither the scientist nor the entrepreneur knows in advance if he is going to be successful in his investigations. Neither individual can say with any degree of accuracy what the nature of the discovery will be. The market's discovery process, like the scientific investigation process, involves uncertainty. This is why the discovery process of the free market, like the discovery process of modern science, does not enable the practitioners to specify in advance what exactly it is that they are attempting to discover. They are attempting to discover solutions. They have only the vaguest understanding of the outline of these solutions.

The private property system establishes the general terms of ownership of new ideas and processes. Because it authorizes entrepreneurs to profit from their discoveries, this system encourages individuals with specialized knowledge to pursue this knowledge in ways that may reward them economically. This is how knowledge, which is widely dispersed, is put to the service of consumers. But these consumers are themselves innovators to some extent. They have participated in the discovery process. They have been successful to some degree, which is why they possess money. They can therefore reward successful producers who serve their wants efficiently. *The private property legal order creates a system of objective feedback*. There is positive feedback: successful innovators prosper. There is negative feedback: unsuccessful innovators run out of money and cease to compete in the marketplace. They cease buying resources from successful entrepreneurs. In this sense, *the entrepreneurial system reflects the final judgment*. It also has a system of positive feedback: inheritance by covenant-keepers. It has a system of negative feedback: disinheritance of covenant-breakers. Covenant-keepers continue to innovate and exercise dominion throughout eternity in the new heaven and new earth (Revelation 21, 22). Covenant-breakers never again gain access to scarce economic resources (Revelation 20:14–15).

E. Rival Management Systems

We learn in the parable of the field owner and the day laborers that there is imperfect information in this world. Perfect information is possessed only by God: omniscience. This is an incommunicable attribute of God.

The overwhelming benefit of the Bible's private property legal order is this: it enables individuals to identify who is responsible for property management. There is a fixed connection between ownership and personal re-

sponsibility. Any attempt to undermine this connection is an assault on biblical ethics. The dominion covenant involves the extension of man's dominion across the face of the earth. This inescapably requires men to exercise personal responsibility. In order to encourage men to exercise dominion, the private property legal order authorizes innovators and entrepreneurs to profit from their discoveries. It is this strong element of economic self-interest that undergirds the extension of the dominion covenant in history and in eternity. The private property legal order offers rewards to individuals who possess accurate knowledge of how to apply general principles of economic organization to specific historical conditions. This kind of knowledge is decentralized. If there is no system of rewards associated with the possession and implementation of this knowledge, innovation will be minimal.

The following analysis rests heavily on the insights found in the 1944 book by Ludwig von Mises, *Bureaucracy*. There are two forms of management: bureaucratic management and profit management. In theory, property can be managed primarily by civil government. This is the bureaucratic management model. Property can also be owned by individuals and corporations. This is the profit management model. Bureaucracy is a top-down model. The process of discovery is directed from the top. Profit management is a bottom-up model. Discovery is at the periphery institutionally. One ownership system involves the assumption of greater practical wisdom through bureaucratic management. The other involves the assumption of greater practical wisdom through individual enterprise.

I add the following insights. The bureaucratic management model universally conceals personal responsibility for failure and therefore also for success. Successful bureaucratic innovators are not rewarded by allowing them to share in the ownership of their discoveries. Bureaucratic promotions and raises are based on seniority, not successful innovation. In contrast, the profit management model is most successful when those who are responsible for an innovation and the profits resulting from innovation are rewarded in terms of their contribution to the process of discovery. An important aspect of the discovery process in profit management is the discovery of new ways of rewarding successful innovation within corporations. Owners of corporations who delegate to managers who in turn discover ways of rewarding successful innovation benefit from a higher rate of return on their economic investment in ownership.

Conclusion

Relevant knowledge is decentralized internationally. It is highly specialized. No central planning agency can identify who possesses which kind of knowledge. It cannot identify how this knowledge can best be put to the service of consumers. Compared to the discovery process of the free market, central planners are blind. They know the value of nothing, and they also know the correct price of nothing. They are doubly blind.

The private property legal order establishes a legal connection between ownership and personal responsibility. This is the central legal benefit of the private property order. It is also the central economic benefit of the private property order. It is beneficial in both senses: trusteeship and stewardship.

Ownership and responsibility are connected legally in the biblical legal order. The dominion covenant requires men to extend dominion in history and eternity. This means that they must take greater responsibility. This in turn means that they must increase their ownership or management of scarce resources. They must become trustees and stewards of these resources. In order to encourage men to accept this increased responsibility, the Bible's private property legal system enables successful entrepreneurs to benefit from their discoveries. This lure of greater economic wealth is a primary motivation for successful entrepreneurship. Successful entrepreneurship inevitably extends the dominion covenant.

Biblical economic analysis must adhere to this presupposition: *the success of an economic system is necessarily based on a rejection of the ideal of mankind's perfect knowledge.* Given the complexity of today's markets, any assumption that there is anything remotely resembling perfect knowledge would be regarded as utterly preposterous by anybody except someone with a graduate degree in economic theory. Incredibly, modern economic theory rests on the assumption that the proper model for economic analysis is men's omniscience regarding conditions of supply and demand. These are the conditions required for the initial analytical assumption of *perfect knowledge*. There is no entrepreneurship in such an economy. There is no entrepreneurial role to play in allocating resources in terms of superior knowledge of local conditions. There can be no monetary prices, since money exists to compensate for a lack of knowledge. Yet the theory relies on monetary prices in its graphs and equations. This is the theory of equilibrium. I have offered my critique of this theory in Chapter 54 of the *Teacher's Edition*.

29

PREDICTABILITY

Now then, prepare a new cart with two nursing cows that have never been yoked. Tie the cows to the cart, but take their calves home, away from them. Then take the ark of the Lord and place it in the cart. Put the golden figures that you are returning to him as a guilt offering into a box to one side of it. Then send it off and let it go its own way. Then watch; if it goes up on the way to its own land to Beth Shemesh, then it is the Lord who has executed this great disaster. But if not, then we will know that it is not his hand that afflicted us; instead, we will know that it happened to us by chance (I Samuel 6:7–9).

Analysis

I have analyzed this passage in Chapter 13 of my commentary on the historical books. The Philistines had a problem. They had defeated the Israelites. Their victory had come despite the presence of the Ark of the Covenant inside the Israelite camp. As a token of their victory, they brought the captured Ark inside the boundaries of Philistia. Every time the Ark was brought into a Philistine city, disasters followed. In Ashdod, the leaders put the Ark in the city's temple in front of the image of the city's deity, Dagon. This image was found the next day bowing before the Ark. The priests put it upright again. The next morning, it was found bowing to the Ark, but with its hands and head broken off. Meanwhile, people in the city were struck with hemorrhoids (I Samuel 5:1–6). They drew the correct conclusion: "When the men of Ashdod realized what was happening, they said, 'The ark of the God of Israel must not stay with us, because his hand is hard against us and against Dagon our god'" (v. 7). The leaders decided that Gath should have the honor of being the residence for the Ark. They sent the Ark to Gath.

The people of Gath were immediately struck with hemorrhoids (v. 9). They sent the Ark to Ekron. The leaders of Ekron did not want the honor (v. 10). The Ekronites had figured out cause and effect here. "So they sent for and gathered together all of the rulers of the Philistines; they said to them,

'Send away the ark of the God of Israel, and let it return to its own place, so that it does not kill us and our people.' For there was a deathly panic throughout the city; the hand of God was very heavy there. The men who did not die were afflicted with the tumors, and the cry of the city went up to the heavens" (vv. 11–12).

We see here the speeding up of assessment and decision-making. In Ashdod, it took at least two days. In Gath, it took one day. The Ekronites knew what would happen even before the Ark entered the city. They all drew the same conclusion: the hand of God was on them, and the Ark was the reason. They all adopted the same policy: send the Ark somewhere else. Ekron's leaders knew enough to recommend sending the Ark back to Israel. But the decision-makers hesitated. That would be an admission of defeat. It would mean that the military victory they had enjoyed was due to God, not to the strength of the gods of Philistia. The token of that military victory was the Ark itself. So, they waited another seven months (I Samuel 6:1–2).

The priests still refused to face the problem squarely. So, they hedged their bets. On the one hand, they recommended a trespass offering: five gold pieces fashioned in the shape of hemorrhoids, one for each city (I Sam. 6:17). That would publicly announce to God that they knew who was behind their specific affliction. Also to be included were golden mice (v. 18). On the other hand, they proposed a test. The test was the cart and the undomesticated cattle. Take the cart and the cattle to the edge of the nation. Let it loose. See where the cattle take it. Normally, the cattle would go home. If they went into Israel, the Philistines could then logically conclude that God had been behind all of their afflictions.

The priests still wanted to leave a theological escape hatch. If the Ark could be kept in the land safely, its presence would publicly testify to the victory of the gods of Philistia. The defeat of Israel would then not be seen by the Philistines as God's judgment on Israel, with Philistia serving as His agent of wrath—a kind of backdrop to the history of God's covenant with Israel. That was what Philistia was. The priests suspected this, which is why they designed the test. But they wanted a way out of this public admission of second-place temporary status in history. This way out would be determined by cattle.

Modern science uses the science of statistics to identify causation. In subatomic physics, probability replaces causation. For atomic physics and everything else, there is an endless epistemological battle between those

who regard deviations from randomness as the test of causation vs. those who affirm logic as the source of causation. This goes back to the rival schools of pre-Socratic philosophy: Heraclitus (randomness) vs. Parmenides (logic). This debate has never been resolved.

The priests of Philistia adopted a version of randomness: a pair of milk cows. Their calves were separated from them. Normally, the cows would follow their calves. If the cows, which had never before been yoked, headed back across the border into Israel, then causation in this case was not chance-based. It was ordered by God. The cows would normally follow their calves. Unless their calves wandered into Israel, the cows would not wander into Israel. *The test was rigged in favor of the gods of Philistia*. The priests did not let the calves make the decision. Who knows? One might have stayed in Philistia, while the other went into Israel. That would be chance. Instead of flipping a coin—coins had not yet been invented—the priests could have let the calves decide the issue. The calves didn't. God did.

Like loaded dice, like a rigged roulette wheel, or like marked cards, the test was rigged. It was stacked against the God of Israel. The priests talked chance, but they did not really believe in it. They believed in self-interest: in this case, the self-interest of a pair of cows. The test was designed to favor the cows' self-interest. But, just in case God really was in charge this time, it would cost the nation some of its gold reserves. That was what happened. "The men did as they were told; they took two nursing cows, tied them to the cart, and confined their calves at home. They put the ark of the Lord on the cart, together with a box containing the golden mice and the castings of their tumors. The cows went straight in the direction of Beth Shemesh. They went along one highway, lowing as they went, and they did not turn aside either to the right or to the left. The rulers of the Philistines followed after them to the border of Beth Shemesh" (I Samuel 6:10–12).

The Bible is clear: *there is no such thing as chance*. There is providence, but there is no chance. There is no randomness. Especially, there is no impersonal randomness. There is a sovereign God who has a decree governing history, and who fulfills His decree predictably. But this predictability is perfect only in the eyes of God. He imputes perfection to His decree by His sovereignty. Men cannot do this. Men are not God. They are not omniscient. They do not understand all of the facts of the universe. But they do understand some things. The Bible is clear on this: "The secret matters belong alone to the Lord our God; but the things that are revealed belong

forever to us and to our descendants, so that we may do all the words of this law" (Deuteronomy 29:29). This is an easy verse number to remember. Do not forget it.

A. Statistics and Understanding

Men want to believe that they live in an orderly universe. They want to believe that some men can discover the laws of causation that govern the universe. If such laws exist, and if men can discover them, then the rest of humanity can pursue their individual goals with some degree of legitimate hope of achieving them.

Beginning in the fourteenth century in the West, mathematicians began to discover patterns in men's lives that can be described mathematically. This was the origin of statistics. This offered new hope to men that they could achieve greater predictability in their lives. This would protect them from disasters. It might also enable them to succeed through an understanding of causation. It was not until 1662 that statistics began to be used systematically for greater understanding. Wikipedia reports: "The birth of statistics is often dated to 1662, when John Graunt, along with William Petty, developed early human statistical and census methods that provided a framework for modern demography. He produced the first life table, giving probabilities of survival to each age. His book, *Natural and Political Observations Made upon the Bills of Mortality*, used analysis of the mortality rolls to make the first statistically based estimation of the population of London." This was a Western discovery.

1. Insurance and Risk-Sharing

From early days, men who were involved in various forms of shipping recognized that they could reduce the threat of total loss by coming to agreements with each other regarding the transfer of risk. A group of shippers agreed that if one or more of their ships went down, they would be rewarded by the profits of the other shippers. They were willing to take a reduced rate of profit from the uncertainties associated with shipping in order to decrease their risk of loss. Ancient Chinese traders used such arrangements. So did the Babylonians. The code of Hammurabi mentions such arrangements.

Ancient shippers realized that there was no way to predict a rate of loss associated with shipping when only a few ships were involved. But if a larger group of ships was involved, then risk could be shared among the owners.

There would be sufficient statistical predictability of the contracts to reduce the risk of total loss from a storm or piracy.

These arrangements became far more widespread in late medieval and Renaissance shipping arrangements in the West. Shipping insurance became more predictable. The mathematics of loss enabled shippers to reduce the likelihood of major disasters destroying their wealth. This understanding became widespread among Western European shippers no later than the thirteenth century. Such arrangements were condemned by the Pope as usurious. The first known insurance contract dates from Genoa in 1347. In the next century, maritime insurance developed widely.

The statistics of insurance has been one of the great discoveries in the history of man. It has especially favored the West. The discovery of double-entry bookkeeping and the statistics of insurance were made at about the same time. These discoveries greatly benefitted the development of Western business techniques.

2. Benefits to the Middle Class

Insurance allows the pooling of risk. Insurance is a way for individuals to convert economic uncertainty to risk. There is no way to deal statistically with the uncertain events of a person's life, but it is possible to deal statistically with risk-based events in life, as long as a large enough number of insured individuals is involved. This has enabled middle-class people and even poorer people to gain the benefits associated with great wealth. Consider fire insurance. A fire can be devastating financially. A family has most of its wealth tied up in its home. A very rich person can suffer the loss of his home and afford to rebuild. This is not possible for people who are not exceptionally rich. So, a form of loss that was economically devastating throughout history can be mitigated through fire insurance policies. The first policies were sold in 1676 in Hamburg.

The statistics of insurance have been found to prevail in many areas of life. This has mitigated the effects of major losses in the lives of families that have been able to afford insurance policies. This has advanced dominion remarkably. The setback associated with a devastating loss can be mitigated by the payment of money by an insurance company. People can hedge against major setbacks in their lives. They are willing to accept reduced discretionary income in order to protect themselves from catastrophic losses.

The development of insurance was made possible by developments in mathematical application. But the main source of insurance contracts has been the free market. The mathematical techniques associated with insurance coverage have spread throughout the economy as a result of profit-seeking activity on the part of entrepreneurs of insurance. Most of the companies' returns have been the result of the sharing of risk. There is no way to know whether a particular insurance company is going to survive and prosper. Survival is therefore an aspect of uncertainty, and therefore an aspect of entrepreneurship. But the insurance industry as a whole is highly likely to survive almost any economic setback. This is because the income of the companies is based on risk-sharing. There are underwriters who reduce the risk of certain kinds of policies across multiple companies.

Insurance's great benefit is this: *it makes our lives more predictable*. The disasters of life strike us down, but they do not strike us down with the same intensity that they did prior to the discovery of insurance. The personal catastrophes in our lives are not predictable, but our long-term ability as individuals to recover from these catastrophes is made less expensive through insurance.

We want to reduce the uncertainties of life. There is no program to achieve this. Uncertainty is an aspect of Deuteronomy 29:29. As a fall-back position, we want to reduce the impact of the negative uncertainties of our lives. We have found ways of mutually shifting statistical uncertainty to others, which converts the economic effects of uncertainty to risk.

Only in 1921 did the nature of this arrangement become part of a conceptual interpretation of statistics. In his classic book, *Risk, Uncertainty, and Profit*, youthful economist Frank H. Knight made a distinction between uncertainty and risk. Risk has to do with statistically predictable outcomes. These predictable outcomes are the basis of all insurance contracts. In contrast, uncertainty is not predictable, statistically speaking. It is not possible to create a profitable insurance industry by writing insurance policies on uncertain events. Such events have no probability. Knight used this analysis to distinguish between insurance and entrepreneurship. Entrepreneurship has to do with uncertainty, not risk. Entrepreneurial profit is the result of statistically unpredictable outcomes.

Humanistic economic theory explains the success of insurance in terms of cosmic impersonalism and chance. Economists see the universe as grounded in chance, yet they also see the universe in terms of unbreakable

law. Once again, it is Heraclitus vs. Parmenides. The fusion of cosmic indeterminism with cosmic determinism in the form of insurance contracts cannot be explained in terms of humanistic presuppositions regarding cosmology. But the enormous success of these contracts has not been in any significant way inhibited by the lack of an explanation.

3. Gambling vs. Entrepreneurship

Gambling is an ancient practice. Men place their wealth on the line. They do so in games of chance, which seem to be impersonal. Nevertheless, some gamblers believe in luck, which is not random. They speak of lady luck, as if luck were personal. Other gamblers believe in fate, which also is not random. Gamblers understand fate both personally and impersonally. This perpetual dualism between luck and fate is common to every society. Men want to explain the seemingly coherent aspects of causation in the universe, but they do not wish to invoke a sovereign God. That would interfere with their own claims of sovereignty. They would rather be ruled by luck or fate than by a personal God in terms of His decree.

Gambling is not the same as entrepreneurship. Gambling is part of a zero-sum game. The winners benefit at the expense of losers. The game is played for the sake of excitement. It does not reduce uncertainty in life. It is not an example of uncertainty in life. The uncertainties of life are inescapable. We do not have the ability to predict uncertainty in our lives. In contrast, gambling is consistent with the laws of statistics. It offers no benefit to society, other than the thrill of winning and losing. Rothbard has summarized the difference between gambling and entrepreneurship.

> It is not accurate to apply terms like "gambling" or "betting" to situations either of risk or of uncertainty. These terms have unfavorable emotional implications, and for this reason: they refer to situations where *new* risks or uncertainties are *created* for the enjoyment of the uncertainties themselves. Gambling on the throw of the dice and betting on horse races are examples of the deliberate creation by the bettor or gambler of new uncertainties which otherwise would not have existed. The entrepreneur, on the other hand, is not creating uncertainties for the fun of it. On the contrary, he tries to reduce them as much as possible. The uncertainties he confronts are already inherent in the market

> situation, indeed in the nature of human action; someone must deal with them, and he is the most skilled or willing candidate. In the same way, an *operator* of a gambling establishment or of a race track is not creating new risks; he is an entrepreneur trying to judge the situation on the market, and neither a gambler nor a bettor. (*Man, Economy, and State*, 8:9)

B. Contracts

The innovations associated with insurance are the result of contracts. Contracts are part of a well-developed program of reducing unpredictability in our lives.

The biblical model for a contract is a biblical covenant. The four major covenants are these: individual, family, church, and state. The final three agreements are made between individuals and under God. They are sealed by a self-maledictory (cursing) oath. Remove the self-maledictory oath, and we have a contract.

1. Interdependence

A contract is an agreement between individuals or organizations in which each party agrees to perform certain tasks. It is an aspect of the division of labor. Each party to the contract becomes dependent on the performance of the other. There is an inescapable interdependence in all contractual relationships. We become more dependent on others as a result of contracts.

The reason why we enter into these contracts is that we fear becoming totally dependent on ourselves as individuals. We recognize our own limitations. We understand that our inability to perform a particular task in an efficient way is a threat to our wealth, security, and mental well-being. We seek out others who will agree to perform these tasks in exchange for money or in exchange for the performance of other tasks for which we are better equipped.

A contract can be legally binding or not legally binding. Generally, a contract is legally binding, but people enter into agreements with each other that are not enforceable in a civil court. In societies in which there is widespread trust, the use of verbal promises, which are contracts, is much more widespread. People do not want to enter into agreements with each other if there is a strong probability that in order to settle a broken agreement, the participants in the contract will have to go before a civil judge.

2. Predictability

There is a phrase in the English language: "My word is my bond." This is an assertion of personal reliability. Put differently, it is an assertion of personal predictability. Somebody who makes this assertion is claiming for himself moral superiority to people who enter into a contract or agreement, and then break their word. Again, the model of this is a covenant. The most important section in the Bible on the rules governing covenantal vows is Numbers 30. Most of the chapter is devoted to the vows taken by women. It begins as follows: "Moses spoke to the leaders of the tribes of the people of Israel. He said, 'This is what the Lord has commanded. When anyone makes a vow to the Lord, or swears an oath to bind himself with a promise, he must not break his word. He must keep his promise to do everything that comes out of his mouth" (Numbers 30:1–2). [North, *Numbers*, ch. 16] Solomon wrote: "When you make a vow to God, do not delay to do it, for God has no pleasure in fools. Do what you vow you will do. It is better not to make a vow than to make one that you do not carry out. Do not allow your mouth to cause your flesh to sin. Do not say to the priest's messenger, 'That vow was a mistake.' Why make God angry by vowing falsely, provoking God to destroy the work of your hands?" (Ecclesiastes 5:4–6). [North, *Ecclesiastes*, ch. 16]

A contract does not have the same degree of authority that a covenant does, but the attitude that people have towards covenants should also prevail with respect to contracts. A person who fears God greatly, and who fully understands that a promise that has come out of his mouth or into a written contract must be honored, is a more reliable partner in a contract. His performance will be more predictable. Therefore, someone else who becomes dependent on this person by transferring responsibility to him in a contractual arrangement does not bear the same degree of uncertainty that is associated with a contractual arrangement with someone who does not fear God or man. Such a person is not trustworthy. He is predictably unpredictable. He is more likely to default on the terms of the contract, which increases the expense of the other partner in fulfilling the obligation associated with the contract.

Individuals enter into these contracts because they want increased predictability in their lives. They want to become more confident about the outcomes of their work. They recognize what Ecclesiastes recognized: "Two people work better than one; together they can earn a good pay for their labor. For if one falls, the other can lift up his friend. However, sorrow fol-

lows the one who is alone when he falls if there is no one to lift him up. If two lie down together, they can be warm, but how can one be warm alone? One man alone can be overpowered, but two can withstand an attack, and a three-strand rope is not quickly broken" (Ecclesiastes 4:9–12). [North, *Ecclesiastes*, ch. 14] It is better to share the profits of a venture with someone who is reliable in order to increase the predictability that there will be profits in the venture.

C. Incentives

An inescapable aspect of all forms of economic theory is this: a theory of incentives. The question of incentives is ultimately the question of final judgment. There will be winners and losers. The gospel is based on an assumption: individuals wish to avoid permanent negative sanctions, and they also wish to gain the benefits of permanent positive sanctions. Basic to all covenantal thought is the issue of sanctions: point four of the covenant.

Covenant theology does not assert that every individual pursues his individual self-interest. There is such a thing as *covenantal blindness*. Individuals self-consciously and willfully adopt an outlook that is suicidal. Solomon wrote: "Now, my sons, listen to me, for those who keep my ways will be blessed. Listen to my instruction and be wise; do not neglect it. The one who listens to me will be blessed. He will be watching every day at my doors, waiting beside the posts of my doors. For whoever finds me, finds life, and he will find the favor of the Lord. But he who fails, harms his own life; all who hate me love death" (Proverbs 8:32–36).

Without a theory of sanctions, free-market economic theory could not exist. From the days of Adam Smith until today, economists have assumed that individuals respond in a predictable way to the expectation of sanctions: positive or negative. *The structure of free-market economic theory is based on the doctrine of self-interested behavior.* The theory is this: self-interested personal behavior leads to predictable behavior, and predictable behavior becomes part of a process that leads to increased per capita wealth. Self-interest within the legal framework of private ownership is the source of the wealth of nations, according to Smith.

The logic of economic theory is this: "if . . . then." If there are positive sanctions associated with individual performance, then there is greater likelihood, meaning greater predictability, of positive outcomes. This theory does not assume that people are machines. They can make decisions that

are not consistent with their personal self-interest. They can make mistakes. But, despite all of the mistakes, and despite all of the uncertainties of human behavior, a system of incentives increases the predictability of individual behavior and therefore also corporate behavior.

In the case of the negative sanction of bookkeeping losses, individuals and institutions that do not satisfy customer demand find that their losses increase. This leads to their reduced influence in the economy. Their consumption of scarce resources in the quest for profits will be reduced. This frees up scarce resources for other entrepreneurs to purchase in their quest for profits. This increases efficiency. That is to say, it reduces waste.

There is therefore a twin pattern of causation in the economic realm. There is the pattern produced by positive economic sanctions. There is also the pattern produced by negative economic sanctions. Successful entrepreneurs increase their wealth. They increase their control over scarce economic resources. They put these resources to use in order to benefit paying customers. Unsuccessful entrepreneurs experience the opposite effects. The predictability of outcomes is greater under the conditions of a private property legal order than under all rival legal orders. This predictability is the result of two factors. *First*, individuals in a private property legal order are allowed to retain the fruits of their labor. They become personal beneficiaries of their own successes. There is predictability between success as determined by paying customers and increased individual wealth. This predictability is an incentive for individual entrepreneurs to meet the demands of customers with a minimal expenditure of scarce economic resources. They become owners of this residual: the difference between revenues and costs of production. *Second*, there are negative sanctions for individuals who make mistakes. They suffer losses. This removes their influence in the market for capital goods, labor, and raw materials.

Entrepreneurship deals with uncertainty. In doing so, successful entrepreneurship reduces the impact of uncertainty in the lives of consumers. Consumers can be confident that, when they go to a supermarket, or they seek to order something online, they will be able to find what they wish to buy. They do not have to spend time forecasting what they are likely to want to purchase a week from now or a year from now. They are confident that the market process will predictably produce sellers who are willing to sell them what they want at a price they are willing to pay. *As society has grown more complex as a result of economic growth, the predictability of the market*

process has increased. Individuals have more choices as they grow richer, and they are able to find sellers who are willing to satisfy their demand at prices they are willing to pay.

Conclusion

Men seek greater predictability. They do not wish to be tossed around by the inherently unpredictable forces of history. They seek ways to make the outcomes of their decisions more predictable and also more favorable. They are self-interested actors.

The Bible offers a theory of predictability: the decree of God. The universe is not random. It is personal. God is the Creator and Sustainer of our lives. *The Bible places Bible-revealed ethics at the center of this predictability.* We are to obey His laws. "The secret matters belong alone to the Lord our God; but the things that are revealed belong forever to us and to our descendants, so that we may do all the words of this law" (Deuteronomy 29:29).

The development of insurance in the West has been one of the great benefits of what was originally a Christian view of cause-and-effect. Men believed in a sovereign God who sustains the universe. They believed in the power of the human mind to discover laws of causation that apply both to the heavens and to human affairs. They saw this ability of mankind in terms of the grace of God.

Humanism has borrowed this worldview from Christianity. It has developed theories of causation that are not dependent upon concepts of God's creation, providence, and decree. But humanism has not gone beyond the insights of Parmenides and Heraclitus. The unbreakable laws of the cosmos are in constant conflict with the inherently random processes of history. Humanists have no theory to integrate the two explanations. They go back and forth in a dialectical fashion, generation after generation.

Christian economics offers a theory of causation that is based on the pursuit of self-interest. Men are warned to choose life (Deuteronomy 30:15–20), which is life in the providence and grace of God. The ultimate self-interest is participation in the kingdom of God (Matthew 6:33). [North, *Matthew*, ch. 15] This offers predictable success. The basis of this success is service to God and man. This is not taught by humanistic economic theory.

30

TIME AND INTEREST

Then the servant who had received one talent came and said, 'Master, I know that you are a strict man. You reap where you did not sow, and you harvest where you did not scatter. I was afraid, so I went away and hid your talent in the ground. See, you have here what belongs to you.' But his master answered and said to him, 'You wicked and lazy servant, you knew that I reap where I have not sowed and harvest where I have not scattered. Therefore you should have given my money to the bankers, and at my coming I would have received back my own with interest. Therefore take away the talent from him and give it to the servant who has ten talents. For to everyone who possesses, more will be given—even more abundantly. But from anyone who does not possess anything, even what he does have will be taken away. Throw the worthless servant into the outer darkness, where there will be weeping and grinding of teeth' (Matthew 25:24–30).

Analysis

This is a section in Jesus' parable of the talents. I discussed this at length in Chapter 47 of my commentary on Matthew. The parable tells the story of a businessman who goes on a journey. He called in three stewards. To one steward, he gave five talents, which were monetary units. To the second steward, he gave two talents. To the third steward, he gave one talent. When he returned from his journey, he demanded an accounting. The first steward had doubled his money. The second steward had also doubled his money, but less money. The third steward had made no profit at all. He had buried his talent. He returned it to the owner.

In condemning the third steward, the owner insisted that the steward could have given the talent to the money lenders. This would have produced an increase on the investment that the owner had made in the steward. The increase would have been in the form of an interest payment. *This parable*

categorically affirms the legitimacy of interest. It also affirms the legitimacy of banking. Because the risk-averse steward had buried the coin, the owner received nothing in return. He had done without the use of the talent through the entire period of the journey, and now he found that he was no better off than he was when he had begun the journey.

Consider two facts about this parable. First, it acknowledges that interest-taking is legitimate. God eventually comes to every person and demands a positive return on whatever had been entrusted to him by God. The master had done without the use of his funds during his absence. He is therefore entitled to a minimum return: interest. Second, the parable clearly distinguishes between profits and interest. The other two stewards each produced a profit of 100%. They received the greater praise and greater visible rewards. The minimum required performance was an interest payment. The slothful servant had been unwilling to take even the minimal risk of handing the money over to specialists in money lending, who would have sought out entrepreneurs to lend the money to, entrepreneurs who would then pay a competitive return to the money lenders on this passively managed investment.

The master's capital was supposed to enable the servants to become productive. Each steward either had to become an entrepreneur or else had to seek out an entrepreneur who would put the money to economically productive uses. The talent was not to sit in the earth; it was to perform a socially useful function.

The economic agent who is on the cutting edge of both prediction and production is the entrepreneur. The first two men in the parable were entrepreneurs. They went out and found ways of investing the master's money that produced a positive rate of return. As the parable presents it, this rate of return was higher than what could have been earned by depositing the money with money lenders. Thus, the entrepreneur is understood to be someone who bears much greater risk than someone who deposits money in a bank. The economist calls this form of risk *uncertainty*. It cannot be estimated in advance. It involves guesswork, unlike the depositor who is promised a specific rate of interest when he deposits his money. The future is uncertain to men. We do not know it perfectly. We barely know it at all. We see the future as though we were peering through a darkened glass (I Corinthians 13:12). Nevertheless, all of life involves forecasting. There is no escape. *We must all bear some degree of uncertainty.* But some people are

willing to bear more of it than others, and of these, some are more successful in dealing with it. In economic terminology, some people produce greater profits than others. Profit is a residual that remains, if at all, only after all costs of the business have been paid, including interest.

The only way that the banker can afford to pay out a promised return is because he successfully seeks out borrowers (entrepreneurs or customers) who produce an even higher rate of return. The banker makes his living on the difference between the interest payment which the borrower pays to him and what he in turn pays to the depositors. The banker is able to offer a special service to investors. He can diversify depositors' individual uncertainty by lending to many people—people who, like the servants in the parable, have performed successfully in the past. They have "a track record," to use the language of horse racing.

By lending out money to many borrowers, the banker thereby converts a portion of the depositors' uncertainty into risk: from the statistically incalculable to the statistically calculable. The banker is like an insurer. What does an insurance company do? Its statisticians calculate the likelihood of certain kinds of undesirable events in large populations. These unpleasant events cannot be statistically calculated individually, but they can be calculated collectively if the population involved is large enough. The seller of insurance then persuades members of these large populations to pay periodic premiums so as to "pool" their risks. When one member of the pool suffers the event that has been insured against, he is reimbursed from the pool of assets. Hence, some of life's inescapable and individually incalculable uncertainties are converted to calculable risk by means of diversification: "the law of large numbers."

The same is true of banking. Borrowers will seldom all go bankrupt at once. Most borrowers will repay their debts as specified in their loan agreements. Bad loans are more than offset by the good ones. Thus, the banker can offer a fixed rate of return to depositors. In almost all cases, depositors will be repaid as promised because most of the borrowers repay their loans as promised.

The master in this parable protects his funds in much the same way. He seeks out a group of potential entrepreneurs. He gives each of them an amount of money to invest. He makes predictions regarding their future performance based on their past performance, and then he allocates the distribution of his assets in terms of this estimation. He protects his portfo-

lio by diversification. The master is not an interest-seeking banker, however. The money he invests is his own. He is not acting as the legal agent of other depositors. He legally claims all of the profits. He does not contract with borrowers who agree in advance to pay him a fixed rate of interest. The entrepreneurs are strictly his legal subordinates, unlike the relationship between banker and borrowers.

There is no question that the master not only approves of taking interest, he sends the servant to the nether regions for not taking it. This is strong imagery! The interest payment belongs to the master. By having refused to deposit the master's money with the money lenders, the servant has in effect stolen the master's rightful increase. The servant was legally obligated to protect the master's interests, and interest on his money was the minimum requirement. He failed. The master's judgment of the servant's past performance had been accurate; he was entitled to only one talent initially, for he had not demonstrated competence previously. Had he been given more, he would have wasted more.

All men are stewards of God's property. There is no escape from personal responsibility of this economic stewardship. It is built into the creation. It is an aspect of the dominion covenant. *The parable of the talents is the clearest statement in the Bible regarding the nature of this responsibility.* The owner transfers wealth to the stewards. He then departs. But he will return and demand an accounting. He expects to receive more in return than he transferred. Why is this? In the parable, the lazy steward accused him of morally improper action. "Then the servant who had received one talent came and said, 'Master, I know that you are a strict man. You reap where you did not sow, and you harvest where you did not scatter. I was afraid, so I went away and hid your talent in the ground. See, you have here what belongs to you'" (Matthew 25:24–25). Was the steward accurate in his assessment of the moral character of the owner? He was not. The owner had reaped where he had sown. He was the owner of the property. He had legitimate title to that property. He therefore had a legitimate legal and moral claim on any improved value of that property.

He handed over property to the stewards. He expected to reap. On what basis? Did he sow? Yes, he did. He allocated responsibility for the management of his property to men who were under his jurisdiction. They owed him a positive rate of return. The first two stewards understood this. The third steward did not. Therefore, the owner took the talent from the lazy

steward, or risk-averse steward, and handed it over to the most successful steward, who had doubled the number of the larger number of talents.

The lazy steward claimed that he was returning what was owned by the owner. But he was not returning all of what was owned by the owner. He was returning only what he had been handed. He had refused to invest on behalf of the owner. He therefore reaped nothing on behalf of the owner. He returned the same coin to the owner, but this coin was worth less than the coin had been worth to the owner when the owner had transferred it to him. The owner would have preferred to retain ownership of his coin rather than receive the same coin back, and nothing more, after his journey. He could have taken the coin with him. He could have assigned the coin to one of the other stewards. Instead, he transferred to the risk-averse steward something of greater value than he later received back. The owner had nothing to show for his trust of the steward. He was therefore outraged at the steward's performance.

A. Discounting the Future

Imagine that you have unexpectedly won a contest. You did not buy a lottery ticket. You walked into a business, and because of a contest that you did not know about, you became a winner.

You are told that you have won ten one-ounce gold coins. You are then given a choice. You can receive your coins immediately, or else you can wait for one year to receive your coins. Which option will you select? You will select immediate payment. You will choose not to receive coins in the future. Why is this? The coins you receive today are identical to the coins you will receive in one year. Why not wait a year? For that matter, why not wait two years? Why not wait five years?

You might think this: "I could die in the interim. I would never get the benefits of the coins." The difference between the value to you of the coins today compared to a year from now has to do with your mortality. There is a statistical risk that you might die. You would therefore never gain any of the benefits of owning the coins.

1. A Category of Human Action

I want to make the argument stronger. I want to discuss it as *a category of human action*, not simply in the era after man's fall, but before the fall and also in eternity. I want to discuss it as a *category of finitude*, not simply

a category of the special curse of mankind after the fall: death. So, let us assume that this took place before the fall of man. You would not be facing death. Would you then accept immediate payment or deferred payment? You would accept immediate payment. Do you know why?

The reason for this is that you do not impute the same economic value to coins in the present vs. the same coins in the future. They are the same physically. They are not the same economically. The coins that you can receive immediately have greater value to you than the same coins received in the future. You understand this. Anyone would understand this. But can you explain it?

There is a biblical answer for this. When you receive the offer of coins today vs. coins in the future, you have a responsibility to make a decision. You own a choice: coins now or coins in the future. You are the owner of this choice. It has value. How do you maximize the value of this choice? Are you supposed to maximize the value of the choice? *According to the parable of the talents, you are required by God to maximize the value of this choice.*

Why is the present value of the coins related in the future value of the coins? Because the coins convey *opportunities* to you. You are responsible for allocating responsibilities in the present vs. the future. There is a time sequence to this allocation. This is the result of the laws of creation. God created the world in six days. He did not create the world in a moment of creativity. He established the model of creativity: step by step. Creativity is governed by the sequence of time. *The dominion covenant is an extrapolation of this principle of sequential creation.* Men are to improve the value of the assets that God has transferred to them. They must do this on his behalf economically: stewardship. They must do this in his name: trusteeship. There is no escape from this twofold responsibility.

You owe a tithe of 10% to your local congregation: one coin. You must then decide how to allocate the other nine. To explain the existence of the discount, I will use two categories: immediate production and immediate consumption.

2. Immediate Production

As soon as someone receives anything of value, he has a responsibility to put that asset to work on behalf of God. He must make a decision regarding the highest potential value of whatever it is that he has received. The sooner that he can put this asset to productive use, the sooner that he, and

therefore God, will experience a positive rate of return on the asset. It is more profitable to God to receive a compound rate of interest beginning immediately than to receive back later only what He had transferred originally. The steward can put this asset to productive use. If he cannot do this directly, as the first two stewards did, then he can transfer control of the asset for a period of time to specialists who are skilled in making such investments. We call these people bankers.

As stewards, we must exercise judgment. The dominion covenant demands a lifelong process of improving our judgment in history. Judgment is an aspect of point four of the biblical covenant: sanctions. This judgment involves economic judgment, although it is not limited to economic judgment.

The coins are economic assets. The responsibilities associated with the coins are also economic assets. From the moment that you become an owner of the coins, you become responsible for their allocation. From the moment that you have the option of becoming an owner of the coins, you become responsible for their allocation. Allocation is point two of the categories of economic theory (Chapter 7). It is closely related to point four of the economic covenant: the subjective imputation of value (Chapter 9).

Built into the dominion covenant is temporal succession. Here is a fundamental law of economics: *sooner, not later (at the same price)*. This law is an aspect of the requirement that men improve the economic value of whatever has been transferred to them. It is better to receive this responsibility early rather than later. Because God has transferred something of value to you, you are ready to exercise responsibility. He is in charge of allocation. Allocation is not random. *Allocation is covenantal*. It begins with God; it extends to man. This concept of *God's providential allocation* is inherent in Christian economic theory. This is an important concept of economic theory that distinguishes Christian economic theory from humanistic economic theory, which pretends to be value-free.

The value of an opportunity in the future is less than the value of the same opportunity in the present. That is because the value of the opportunity in the present can be put to immediate productive use. The sooner that God becomes the beneficiary of compound economic growth, the more rapidly that His allocation of resources will become exponential. The goal is dominion sooner rather than later. The goal is therefore compound economic growth sooner rather than later.

3. Immediate Consumption

You may decide that you wish to consume your windfall. Because you accepted payment immediately, you now can lawfully allocate nine coins to consumption. (One coin pays your tithe.)

The nine coins enable you to choose from a wide variety of available consumer goods and services. If you allocate only one or two coins for immediate consumption, you can then place the remaining coins with a banker. The banker will then lend out the money. Somebody will gain access to that money immediately. You will be paid a rate of interest for having forfeited the use of the money in the meantime. Because you will receive an additional payment, you will be able to use this money for other consumption purposes.

If you choose to wait for a year, you will gain no immediate benefit from the money. In contrast, the person who offered you the money will be able to invest this money at a bank. He will gain the interest that this deposit will generate. Because you have delayed your gratification, he will increase either his consumption or his use of the money in his business. *One of you is going to benefit from the money.* You decide who is to benefit when you make the decision either to accept the payment of the money immediately or else wait for a year. If you decide to wait, you will be transferring the value of that money to the person or the company that offered you a choice of receiving the money now or a year from now. It is to the other person's advantage that you defer acceptance of the money. He gets the use of it in the interim.

This is why you will take the money. You will pay your tithe, and you will use the coins for whatever purposes you want. You have a list of priorities of potential consumer expenditures, and you will use the money to achieve these goals. The money is immediately beneficial to you because you will be able to allocate the money to achieve these goals. If you do not take possession of the money, you will not achieve these goals. You will have to wait a year or longer to achieve these goals.

Because human action is sequential, resource allocation in the present must consider how the resource will be spent over time. There is an inescapable cost of time. As with every other resource, *the cost is the value of the most important thing forgone.* Whatever you could have done with the money, but did not do because you waited a year, is your cost of your decision to delay reception of the money. You will receive nothing of value as a result of your delay. Whoever would have transferred the money to you will receive

this value. We are back to this economic principle: *something is better than nothing*. This is why you place a discount on the economic value of identical goods in the future. That discount is the value to you of whatever you will have to forgo as a result of the delay.

B. Sooner or Later

All people are present-oriented. There are degrees of this present-orientation. Everybody would rather have his desires gratified immediately rather than later. *Sooner is better than later, at a fixed price*. People who are intensely present-oriented are unwilling to give up present consumption for the sake of expected future consumption. This outlook is the mark of the lower-class individual. This was the insight of Edward Banfield, a professor of political science at Harvard, in the late 1960s. He defined class in terms of time orientation. People who are future-oriented are upper-class people. They are willing to forgo present consumption in favor of only marginally larger future consumption. They are savers, not borrowers, at a specific rate of interest.

Ludwig von Mises called this difference *time preference*. Some people have high time preference, so they pay high rates of interest on money they borrow. Other people have low time preference, so they lend money at low rates of interest. The free market brings these people together. The rate of interest is the rate of exchange between people with low time preference, who are lenders, and people with high time preference, who are borrowers.

In what we call the money market, the structure of competition is the same as it is in all other markets. Lenders compete against lenders. Borrowers compete against borrowers. Out of this competition comes an array of objective prices associated with present money versus future money: interest rates. *The interest rate is the price of present money vs. future money.*

People get what they are willing to pay for in a competitive market. A present-oriented borrower wants immediate gratification. He is able to purchase this, but only at a price. The price is a high rate of interest that he will have to repay to the lender. He will be poorer in the future than he is today. But this is what he prefers. On the other side of the transaction, a future-oriented person is willing to defer immediate gratification for the sake of a relatively small increase in wealth in the future. He discounts the value of future wealth, but he discounts it at a much lower rate than the present-oriented person does. He lends money to the present-oriented person. He

receives greater wealth in return in the future. He gets what he wants. The present-oriented person gets what he wants. The free market's system of voluntary exchange enables both of them to achieve their goals.

It is clear why a present-oriented person will tend to get poorer over time than a future-oriented person. The present-oriented person does not increase his ownership of capital. He consumes it. The Bible recommends that covenant-keepers become lenders. This increases their dominion over the earth. They will have greater capital over time then present-oriented people will. "The Lord will open to you his storehouse of the heavens to give the rain for your land at the right time, and to bless all the work of your hand; you will lend to many nations, but you will not borrow. The Lord will make you the head, and not the tail; you will be only above, and you will never be beneath, if you listen to the commandments of the Lord your God that I am commanding you today, so as to observe and to do them" (Deuteronomy 28:12–13). [North, *Deuteronomy*, ch. 70.

An officially neutral humanistic economist does not recommend capital creation as a matter of ethics, but Christian economics does. *It is a moral responsibility for the covenant-keeper to accumulate capital*. This is an aspect of dominion. Because humanistic economists do agree on one thing, namely, that economic growth is a blessing, they believe in capital creation, which is the source of economic growth. But this outlook is inconsistent with their self-professed ethical neutrality regarding economic theory.

The market's interest rate is the product of two other factors. One factor is the risk of default by the borrower. Someone who is considered more likely to default will be required by a lender to pay higher rates of interest. This is the *risk premium* of a loan. A second factor is the possibility of either price inflation or price deflation during the period of the loan. If the purchasing power of the monetary unit is expected to rise (prices fall), lenders will accept a lower rate of interest from borrowers. The money they receive from borrowers will buy more. There is an advantage to this: they will not have to pay income taxes on any increase that is the result of increased purchasing power. Their nominal rate of return will be low, but their real rate of return will be higher in terms of purchasing power. This is a disadvantage for borrowers. On the other hand, if the purchasing power of the monetary unit is expected to fall (prices rise), lenders will demand a higher rate of interest. They will receive back money of decreased purchasing power.

C. The Legitimacy of Interest

Is interest-taking morally legitimate? This debate has been going on since at least the days of Aristotle, who regarded money as sterile and interest as unnatural. But if money is sterile, why have men throughout history paid lenders interest in order to gain access to its use for a period? How are so many people fooled into paying for the use of a sterile asset? Besides, interest is a phenomenon of every loan, not just loans of money. Modern economics teaches this; so does the Bible. In contrast, Aristotle wrote: "For money was intended to be used in exchange, but not to increase at interest. And this term interest, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. That is why of all modes of getting wealth, this is the most unnatural" (*The Politics*, I:9).

It is obvious that the phenomenon of interest is not confined to money. Aristotle was incorrect. *The phenomenon of interest applies to every scarce economic resource.* We always discount future value. Whatever we use in the present is worth more to us than the prospect of using that same item in the future. *The present commands a price premium over the future.* The present is now. Our responsibility is now. We must deal with our responsibility now. God holds us responsible now. We make all of our decisions in the present. We enjoy the use of our assets in the present. Wise people plan for the future by purchasing expected streams of income. How? By purchasing assets that they expect to produce net income over time. They purchase these hoped-for streams of income at a discount. The rate of discount that we apply to any stream of expected future income is called the rate of interest. *Interest is a universal discount that we apply to every economic service that we expect to receive in the future.* We demand a discount for cash.

The ownership of the asset offers him an expected stream of income: psychological, physical, or monetary. If it did not offer such a stream of income, it would be a free good. It would therefore not command a price. The owner expects to receive a stream of income. He chooses the degree of risk that he is willing to accept, and he then refuses to lend the asset for less than the interest rate appropriate to this degree of risk.

A person who lends money at zero interest is clearly forfeiting a potential stream of income. He will seldom do this voluntarily, except for charitable reasons. The Bible commands this. "If your fellow countryman be-

comes poor, so that he can no longer provide for himself, then you must help him as you would help a foreigner or anyone else living as an outsider among you. Do not charge him interest or try to profit from him in any way, but honor your God so that your brother may keep living with you. You must not give him a loan of money and charge interest, nor sell him your food to earn a profit" (Leviticus 25:35–37). [North, *Leviticus*, ch. 28] "You must not lend on interest to your fellow Israelite—interest of money, interest of food, or the interest of anything that is lent on interest" (Deuteronomy 23:19). [North, *Deuteronomy*, ch. 57] These are charitable loans. I discuss this in Chapter 50.

D. Keynes, the Crank

The most famous promoter of a world without interest is John Maynard Keynes. He was quite clear about the legitimacy of such a world. He wanted to see it come into existence. Because it is such a crackpot scheme, his followers rarely mention the following. Keynes actually earned only a bachelor's degree in mathematics. He never took a graduate degree in economics or any other subject. His father, Cambridge University economist John Neville Keynes, got him a job teaching economics a Cambridge by putting up the money to pay his salary. From that privileged pulpit, he began to make his international reputation.

In his book, *The General Theory of Employment, Interest, and Money* (1936), Keynes taught that "Interest to-day rewards no genuine sacrifice, any more than does the rent of land. The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital" (p. 376). Keynes recommended the writings of Silvio Gesell, a true monetary crank and socialist, whom he referred to as "the strange, unduly neglected prophet" (p. 363). He spent several pages of the General Theory praising Gesell. Referring to the preface of Gesell's *Natural Economic Order* (1916), Keynes said that "The answer to Marxism is, I think, to be found along the lines of this preface" (p. 355). He went on: "He argues that the growth of real capital is held back by the money-rate of interest, and that if this brake were removed the growth of real capital would be, in the modern world, so rapid that a zero money-rate of interest would probably be justified, not indeed forthwith, but within a comparatively short period of time" (p. 357).

But can the money rate of interest be reduced to zero? Of course, Keynes said. He praised Gesell's plan for the government to issue paper money with a date stamped on it; to keep the money legal, the users would have to get their money re-stamped each month. There would be a stamping tax on the money. Keynes highly recommended this scheme. "According to my theory it [the stamping tax] should be roughly equal to the excess of the money-rate of interest (apart from the stamps) over the marginal efficiency of capital corresponding to a rate of new investment compatible with full employment" (p. 357). Keynes also taught that the marginal efficiency of capital could fall to zero "within a single generation. . ." (p. 220). In fact, he said that it would be "comparatively easy to make capital-goods so abundant that the marginal efficiency of capital is zero. . ." (p. 221). Thus, when the marginal efficiency of capital falls to zero, then there will be no economic reason for the rate of interest not to do the same. Just tax interest and rents out of existence! In short, under his system of economics, "the rentier would disappear. . ." (p. 221).

The European Central Bank set its key rate below zero percent in June 2014. In the summer of 2019, the Euro equivalent of $15 trillion in European government bonds traded below zero percent. This had never happened in recorded history. Was Keynes correct in 1936? In nominal terms, yes. In terms of economic value, no. Bond buyers were purchasing what they believed was a government-guranteed return of their money. They were paying the economic equivalent of a sales commission for what they regarded as an insurance policy for guaranteed returns.

Conclusion

The New Testament is clearly favorable toward lending by bankers. The businessman who gave his risk-averse steward money to invest expected at least the rate of return available by placing the money in the possession of bankers, who would then lend out the money at a positive rate of interest.

Men apply a discount rate to future goods and services that are physically identical to present goods and services. The future goods and services are not equally valuable. This is not just a matter of the risk of default on the part of the borrowers. It is a matter of human action. It is an inherent aspect of the human condition. This is because of the dominion covenant. God has delegated to man economic assets. He expects a positive rate of return on these assets. The minimal positive rate of return is whatever the prevailing rate of interest is in the competitive marketplace for loans.

Here is what the money market really is: *a market for time*. Time is precious. It is a valuable resource. It is not given to mankind free of charge. God expects a positive rate of return on the time He gives to individuals. He holds them accountable for a positive rate of return. Because God demands a positive rate of return, people with money to lend are in a position to fulfill their obligations to God.

When people borrow money to buy consumption items, they are placing themselves as subordinates to lenders. "Rich people rule over poor people, and one who borrows is a slave to the one who lends" (Proverbs 22:7). [North, *Proverbs*, ch. 67] In the long run, this willingness to accept debt in order to purchase consumer goods is a mark of a slave. It is a curse. Moses warned: "The foreigner who is among you will rise up above you higher and higher; you yourself will come down lower and lower. He will lend to you, but you will not lend to him; he will be the head, and you will be the tail. All these curses will come on you and will pursue and overtake you until you are destroyed. This will happen because you did not listen to the voice of the Lord your God, so as to keep his commandments and his regulations that he commanded you. These curses will be on you as signs and wonders, and on your descendants forever" (Deuteronomy 28:43–46). [North, *Deuteronomy*, ch. 70]

Covenant-keepers must cultivate future-orientation. They must teach it to their children. This is an ethical matter. This is not neutral economics. There is no such thing as neutral economics. God's goal is dominion by covenant-keepers. One way to do this is for covenant-keepers to make consumption loans to covenant-breakers. What appears to be a voluntary transaction in which both parties benefit is in fact a strategy of dominion of covenant-keepers over covenant-breakers. The lenders profit from the present-orientation of the borrowers.

Attentive readers may recognize that I have not adopted Mises' approach to explaining interest as a category of human action, what he called the originary rate of interest. This is because Mises adopted equilibrium analysis to explain the discount for time. He called this analytical approach the "evenly rotating economy." He compared the real-world economy to a hypothetical economy based on man's omniscience. I offer my critique of his approach in Chapter 41, Section D: "Equilibrium." On the conceptual error of all equilibrium analysis, see Chapter 54 in the *Teacher's Edition*.